

CAPITAL PROJECTS PLAN FY 2015/2016 - 2019/2020

Sonoma County Water Agency

Overview

Our Mission:

The Sonoma County Water Agency (Water Agency), a special district, was created in 1949 by an act of the California State Legislature. The Water Agency is a wholesale supplier of water to parts of Sonoma and Marin counties; provides flood control services and sanitation services; and has the authority to generate electricity and provide recreational facilities in connection with its facilities. Environmental regulations impacting its core functions have resulted in the Water Agency actively engaged in natural resource (e.g., fisheries, wetlands, etc.) protection, recovery, and enhancement. The Water Agency is implementing the Russian River Biological Opinion, issued by the National Marine Fisheries Service in September 2008, to improve operations for the benefit of endangered coho salmon and threatened steelhead and Chinook salmon.

Mission Statement:

Securing our future by investing in our Water Resources, Environment and Community.

This mission statement and the Water Agency's values are reflected in its Strategic Plan – a five year plan of goals and strategies to address the Water Agency's most pressing needs in the areas of Organizational Operations, Sanitation, Water Supply, Energy and Flood Control. This plan guides the Water Agency as it addresses the challenges it faces in pursuing its mission. The projects in this Capital Projects Plan are derived from the objectives in the Water Agency's Strategic Plan (www.scwa.ca.gov/strategicplan/) and from its Water Supply Strategies Action Plan, which is updated regularly (www.scwa.ca.gov/water-supply-strategy).

Agency Objectives

Water Transmission and Supply Systems:

The Water Agency provides high quality drinking water to more than 600,000 people in Sonoma and northern Marin counties. From its large collector wells near the Russian River, the Water Agency distributes naturally filtered water to the cities of Santa Rosa, Rohnert Park, Cotati, Petaluma and Sonoma; the Town of Windsor; and Valley of the Moon and North Marin water districts. These cities and water districts (water contractors) distribute the water to residents and businesses.

The Water Agency's transmission and supply goals as outlined in the 2013 strategic plan include: (1) work with water contractors to retain and improve the reliability of the water supply production and distribution systems, including short-term emergencies, such as earthquakes, and during long-term challenges caused by extended droughts and global climate change; (2) protect the Agency's existing water rights and our clean, high-quality water supply and improve system resiliency by continuing to develop alternative supplies; and (3) maintain stable water supply revenue source and improve operational efficiencies.

Sanitation Systems:

The Water Agency manages and operates eight different sanitation districts and zones throughout Sonoma County that serve more than 50,000 people. These include the Sonoma Valley, Russian River, Occidental and South Park County sanitation districts and the Geyserville, Penngrove, Sea Ranch and Airport-Larkfield-Wikiup sanitation zones. High-quality tertiary treated recycled water is an important source of water that helps offset potable water demands.

The Agency's sanitation goals as outlined in the 2013 strategic plan include: (1) meet or exceed environmental regulations and public health standards; and (2) provide adequate rate-based revenues, while pursuing new income and cost-cutting opportunities.

Flood Control:

Flood risks in most communities in Sonoma County have been reduced through the construction of flood protection facilities which include flood control channels and stormwater detention reservoirs. The Water Agency maintains these flood protection facilities in a manner that balances public safety and environmental needs.

The Water Agency's flood control goal as outlined in the 2013 strategic plan requires maintaining, operating, and modifying flood protection facilities to meet current and future public needs.

Purpose and Background of Funds

The Water Agency's Capital Projects Plan identifies projects to be constructed over the next five years and designed to meet the Water Agency's mission and strategic objectives.

Water Transmission:

In order to reliably, safely, and efficiently supply potable water to its eight water contractors, the Water Agency plans, performs environmental reviews, designs, and constructs capital improvement projects. The expansion and improvement of the water transmission system is included in the terms and conditions of the Restructured Agreement for Water Supply (Agreement) between the Water Agency and its water contractors. The water contractors' Water Advisory Committee (WAC) and/or Technical Advisory Committee (TAC) meets regularly (WAC quarterly and TAC monthly) with the Water Agency to discuss the scheduling and financing of water transmission system projects and other water supply and transmission system issues.

Capital improvements made to the water transmission system are typically funded from the Storage Facilities Fund, the Pipeline Facilities Funds, and the Common Facilities Fund to meet the needs of the water contractors for the facilities identified under the Agreement. Capital projects have been scheduled to accommodate funding limitations, to provide the least disruption to existing facilities and water contractors, and to allow an orderly and timely start-up to meet the conditions of the Agreement or any new laws or regulations governing drinking water suppliers.

Water Supply:

The Water Supply funds include the Russian River Projects Fund, the Recycled Water Fund and the Warm Springs Dam Fund. These three funds are used: (1) to pay the costs for water supply and erosion control activities along the Russian River arising from assurances given by the Water Agency for the construction of the Coyote Valley Dam Project and Warm Springs Dam Project; (2) to pay the costs incurred by the Water Agency in securing and defending its appropriative water rights necessary for the realization of the full benefit of those projects; (3) to pay the costs incurred by the W at e r Agency in operating the Coyote Valley Dam and Warm Springs Dam Projects; (4) to pay the costs for water supply issues arising from activities of the Potter Valley Project; and (5) for fishery enhancement programs to ensure compliance with environmental regulations and pay for recycled water projects.

Special Revenue Funds-Flood Control Zones:

The Special Revenue Funds described below are used to construct and improve flood control facilities and to provide program support services for the flood control zones in Sonoma County. Common types of features constructed to help alleviate flooding are channelization works, bypass conduit systems, diversion and detention systems. In addition, natural systems are maintained to provide flood control capacity. Sonoma County is divided into nine major watershed areas. Flood control zones were created encompassing eight of these watersheds. Zone 1A (Laguna-Mark West), Zone 2A (Petaluma River), and Zone 3A (Valley of the Moon/Upper Sonoma Creek) have the most active flood control programs. Zone 4A (Upper Russian River) and Zone 6A (Dry Creek) are completely inactive. Zone 5A (Lower Russian River) and Zone 8A (South Coastal) are less active than Zones 1A, 2A, and 3A, with only ongoing maintenance of existing facilities being performed. Zone 7A (North Coastal) has minimal fund reserves earning interest. The ninth watershed area, covering the lower portions of Sonoma Creek and the Petaluma River, was never established as a zone.

Flood control zones were created to reduce the frequency of flooding within the zone through construction of facilities to safely handle projected storm flows. An appointed advisory committee for each active zone meets regularly to make recommendations to the Water Agency's Board of Directors regarding priorities for flood protection projects within each zone. Proposed projects are evaluated in consideration of historical flooding problems, areas benefited, alternative funding available, special safety and health factors, coordination with other public projects, and environmental concerns.

Flood Control Zone 1A is the watershed area that drains into and includes the Laguna de Santa Rosa and Mark West Creek.

Flood Control Zone 2A is the watershed area in Sonoma County that drains into and includes the Petaluma River, with the exception of the most southerly portion of the area, which consists primarily of reclaimed tidelands.

Flood Control Zone 3A is the watershed area in Sonoma County that drains into and includes Sonoma Creek, generally north of Highway 121.

The primary funding source for all three Zones is an ad valorem property tax. In the past, capital projects in Zone 1A and 2A were also funded by a voter-approved 10-year benefit assessment program for flood control, which ended June 30, 2007. Some additional funds are sometimes available from cities, the County, and community development sources to construct flood control projects. In more recent years, grants from state bond measures have also been a source of funding for flood control projects.

Sanitation:

The Water Agency owns and operates four sanitation zones, which include Airport-Larkfield-Wikiup, Geyserville, Penngrove, and Sea Ranch. The Water Agency is also responsible for the overall management (including operation) of four County Sanitation Districts. The four districts include Occidental, Russian River, Sonoma Valley, and South Park. Each County Sanitation District exists as a separate legal entity. The sanitation zones operate as zones of benefit, similar to the Water Agency's flood control zones. Sanitation projects are scheduled according to the specific needs for each zone or district. Funding of projects may be accomplished by Federal and/or State grants, state revolving fund loans, certificates of participation, notes, revenue bonds, or on a pay-as-you-go basis.

Airport-Larkfield-Wikiup Sanitation Zone:

The Airport-Larkfield-Wikiup Sanitation Zone (Airport S.Z.) treatment facility was originally designed as a zero discharge facility with the ability to treat wastewater to secondary wastewater treatment standards. The treatment facility was initially constructed in 1983 and has been expanded twice since then (1989 and 1997). Tertiary filters were installed at the treatment facility in 2005 allowing expanded use of the recycled water produced by the Airport Sanitation Zone. The treatment facility currently has a dry weather capacity of 0.9 million gallons per day ("m.g.d."). The Water Agency has initiated a study to update its sewer master plan and collection system modeling for the Airport S.Z.

Geyserville Sanitation Zone:

The Geyserville Sanitation Zone (Geyserville S.Z.) treatment facility became operational in 1981 and is designed to treat an average dry weather flow of up to 92,000 gallons per day. The current and future treatment facility inflows are expected to remain less than the treatment and disposal capacity of the Geyserville S.Z. facilities.

Occidental County Sanitation District:

The Occidental County Sanitation District (OCSD) treatment plant first became operational in 1950 and was upgraded in 1970 and 1975. The plant is designed to treat an average daily dry weather flow of up to 50,000 gallons per day to secondary treatment standards. Each year, between October 1 and May 14, treated wastewater from the OCSD is discharged into Dutch Bill Creek under a permit from the North Coast Regional Water Quality Control Board (NCRWCB). During the balance of the year, treated wastewater is used for irrigation.

The OCSD faces serious financial and operational difficulties. Due to the district's small ratepayer base, operating revenues are not sufficient to fund ongoing operations, maintenance and administrative activities. The Water Agency annually subsidizes from its General Fund the OCSD. In addition, the OCSD is under a cease and desist order from the NCRWCB to end discharges of secondary treated wastewater into Dutch Bill Creek by 2018. A process is underway to identify alternatives.

The ability to increase rates in this district is limited, and funding for the selected project will be financed mostly through outside funding. The projects in this section of the plan meet the objectives in Sanitation Goals and Strategies in the Water Agency's Strategic Plan.

Penngrove Sanitation Zone:

Water Agency operations in the Penngrove Sanitation Zone (Penngrove S.Z.) are limited to administrative services and operation/maintenance of the collection system and pumping station. The wastewater collected by the Penngrove S.Z. collection system flows through the City of Petaluma's collection system to the City of Petaluma's wastewater treatment facility where it is treated to meet tertiary standards.

Russian River County Sanitation District:

The Russian River County Sanitation District (RRCSD) treatment plant was completed in September of 1980 and began operating in 1982. The RRCSD treatment plant is designed to treat an average dry weather flow (ADWF) of up to 0.71 mgd to advanced (tertiary) wastewater treatment standards. The RRCSD has an easement on approximately 77 acres of forest area adjacent to the treatment plant (referred to as the Burch property). Seventeen acres of the easement are best suited for irrigation purposes and are currently used for spray irrigation. In addition, approximately 43 acres of turf at the Northwood Golf Course are irrigated with tertiary treated wastewater. Expansion of the dry weather disposal area is necessary in order to ensure adequate disposal of dry weather inflow.

The treatment plant has historically experienced operational difficulties associated with major flooding on the Russian River. Soon after the Water Agency assumed operations of the facility in 1996, engineering and environmental documentation began to address operational problems associated with Russian River flood events, the irrigation system, and obsolete equipment at the RRCSD treatment plant.

The NCRWQCB adopted a series of enforcement orders for the RRCSD in response to violations associated with flood events. In response, the RRCSD began implementation of a series of short- and long-term projects aimed at bringing the facility into compliance. The facility was brought into compliance with the completion of the Third Unit Process project in early 2005. This project, along with modifications to the lift station operations during flooding events in the Guerneville area, allows the treatment plant to pass all influent through the full treatment process. This was not possible during flood events prior to completion of the Third Unit Process Project.

In an effort to eliminate the discharge of treated wastewater containing chlorine-based disinfection by-products into the Russian River, the District, in 2012, upgraded its treatment facility to utilize ultraviolet disinfection technology. In 2014, the treatment facilities were further enhanced to reduce nitrogen and phosphorus based nutrient discharges to the Russian River.

In addition, RRCSD has initiated a study to update its sewer master plan and collection system modeling.

Sea Ranch Sanitation Zone:

The Sea Ranch Sanitation Zone (Sea Ranch S.Z.) consists of two wastewater collection and treatment systems located in Central and North Sea Ranch. The Central and North treatment facilities both provide treatment to secondary wastewater treatment standards.

These collection and disposal systems operate independently and are isolated from each other. The Central and North treatment facilities are designed to treat average daily dry weather flows of up to 27,000 and 160,000 gallons per day, respectively. Treated wastewater from the Central treatment facility is disposed of through irrigation on land that is adjacent to the treatment facility. C u r r e n t l y , t he North treatment facility pumps raw wastewater to the Gualala Community Services District's (GCSD) wastewater treatment facility where it is combined with GCSD influent and treated to tertiary standards. The combined effluent of North and GCSD's treatment facility is disposed of through irrigation on the Sea Ranch Golf Links. The Sea Ranch Water Company is under contract to operate and maintain the SRSZ facilities for the Water Agency.

The Water Agency and The Sea Ranch Association, owner of the Sea Ranch Water Company, continue to investigate options for the continued operation of the Sea Ranch S.Z. Options being considered include executing an agreement between the Water Agency and the Sea Ranch Association for the continued operation of the sewer facilities and/or the transfer of all assets, liabilities, and management responsibilities to the Association.

Sonoma Valley County Sanitation District:

The Sonoma Valley County Sanitation District (SVCSD) provides sewage collection, tertiary level treatment of wastewater, and disposal service for the Sonoma Valley area. Wastewater is collected by a gravity system and flows to the SVCSD wastewater treatment facility for processing. Recycled water is used to irrigate local crops during the summer. During the winter, treated wastewater is provided to the Napa-Sonoma Salt Ponds for environmental restoration of the ponds, or is otherwise discharged to San Pablo Bay via Schell Slough and Hudeman Slough. The SVCSD treatment facility is permitted to treat an average daily dry weather flow of up to 3.0 million gallons per day.

In April 2002, the SVCSD completed a wet weather overflow prevention study (a study that complied with a San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) issuance of a Notice of Violation for sewer system overflows in April of 1999). This study identified areas within the SVCSD collection system where repair and/or replacement projects were most needed, including numerous trunk main and collection system projects. The SVCSD has implemented a capital replacement program with the long-term intent of replacing these pipeline sections.

In 2012, construction was completed on a new 100 acre-foot storage pond for recycled water. This pond, which was funded by a combination federal Bureau of Reclamation and district funds, allows recycled water to be used for increased agricultural irrigation, restoration of the Napa-Sonoma salt marsh, and urban uses. In addition, in 2013, construction was completed on the 2,400 foot Napa

Sonoma Salt Marsh pipeline, which allowed delivery of 1,700 acre feet annually of recycled water to help restore a 640-acre former salt pond. In 2014, construction was completed on a new sludge dewatering facility that reduces the District's expenses for disposing of biosolids.

In addition, SVCSD has initiated a study to update its sewer master plan and collection system modeling.

South Park County Sanitation District:

The South Park County Sanitation District (SPCSD) provides service to the South Park area using a gravity collection system that discharges to the City of Santa Rosa's collection system. Wastewater from SPCSD is treated and disposed of by the City of Santa Rosa at the Laguna Sub-regional Treatment Plant on Llano Road. In July of 1996, the City of Santa Rosa accepted responsibility for the operation and routine maintenance of the collection system.

An agreement for transfer of responsibility to the City of Santa Rosa of collection system operation and maintenance, and subsequent dissolution of the SPCSD, was finalized on February of 1996. The agreement has been amended several times in the subsequent years. Under this agreement the SPCSD was to be dissolved and transferred to the City of Santa Rosa, subject to certain conditions that included the replacement, slip-line, or repair of 41,610 feet of the collection system and upgrade of the Todd Road lift station before transfer of the SPCSD to the City of Santa Rosa.

In 2012, an amended and restated agreement recognized that dissolution of the District and transfer to the City of Santa Rosa could not occur without annexation by the City, and therefore, a specific schedule for dissolution was removed from the agreement, along with specific targets for collection system improvements. Nonetheless, the District and City are continuing to work collaboratively in addressing needed collection system upgrades with the understanding that dissolution and transfer to the City will ultimately occur.

On December 22, 1998, the NCRWQCB released a draft Cleanup and Abatement Order (CAO) for halogenated volatile organic compounds (HVOCs) found in soil and groundwater in the vicinity of Sebastopol Road and West Avenue in the SPCSD service area. The draft CAO specified that HVOCs found in the soil and groundwater are the result of a release from the SPCSD collection system. Potential costs for investigation, remediation, and legal work related to HVOCs in soil and groundwater are substantial (\$2-10 million) and have not been included in this capital plan. Rather than finalize the draft CAO, the SPCSD, County of Sonoma, and the NCRWQCB entered into a cooperative agreement in July of 1999 referred to as the "Plan of Action for HVOC Investigation and Mitigation in the Roseland Area" (Plan of Action). As part of the Plan of Action, SPCSD has performed an investigation of the extent of HVOCs in groundwater in the vicinity of West Avenue and Sebastopol Road. A final report summarizing the results of this investigation was submitted to the NCRWQCB in February of 2002. The SPCSD and the County of Sonoma have been working with the NCRWQCB to coordinate groundwater studies by other parties for related groundwater contamination issues in the Roseland area. Upon completion of these studies, it is anticipated that remediation strategies will be developed by the SPCSD, County of Sonoma, NCRWQCB, and other parties associated with these groundwater issues.

Administration and General:

These funds include the General Fund, the Spring Lake Park Fund, and the Sustainability-Renewable Energy Fund. The Spring Lake Park Fund provides for occasional construction projects in Spring Lake Park. Spring Lake Park is a public park owned by the Water Agency and operated under contract by the Sonoma County Regional Parks Department. The Sustainability-Renewable Energy Fund provides for the Agency's Renewable Energy, Efficiency and Sustainability efforts.

Internal Service:

The Internal Service Fund provides for: (1) building improvements to the Administration building at the Agency's 404 Aviation Boulevard site; (2) building improvements to the Operations and Maintenance facility at 204 Concourse Blvd; (3) building improvements to the Service Center facility located at the Airport Treatment Plant; (4) building improvements to the former Administration, Service Center, and Operations and Maintenance facilities at the Water Agency's West College Avenue site; (5) funding of new building sites and other land purchases; and (6) electric power development and sales for the various enterprises owned and managed by the Water Agency.

$Funding\ Source\ Report \qquad \hbox{(Amounts rounded to 000's) -}$

Division/Section	Funding Source	Prior FYs	Current FY	FY1 2015-16	FY2 2016-17	FY3 2017-18	FY4 2018-19	FY5 2019-20	5YR Total	Future Yrs	Project Total
Water Transmission System - Common Facilities Fund		6,006	23,692	7,931	12,672	3,959	15,039	26,486	66,086	6,100	101,884
	Water Transmission	1,934	7,727	2,350	2,157	3,859	15,039	26,486	49,890	6,100	65,651
	Water Transmission, CDFW	2,447	14,345	1,500	0	0	0	0	1,500	0	18,292
	Water Transmission, FEMA PDM	1,625	1,621	4,081	10,515	100	0	0	14,696	0	17,942
Water Transmission System - Common Facilities Fund/General Fund		559	2,297	80	0	0	0	0	80	0	2,936
	General Fund	254	1,702	. 80	0	0	0	0	80	0	2,036
	Water Transmission	305	595	0	0	0	0	0	0	0	900
Water Transmission System - Pipeline Fund		274	525	6,310	440	4,750	4,700	4,300	20,500	10,550	31,849
	Water Transmission	274	525	6,310	440	4,750	4,700	4,300	20,500	10,550	31,849
Water Transmission System - Storage Fund		1,029	683	25	1,100	0	0	0	1,125	0	2,838
	Water Transmission	545	633	0	1,100	0	0	0	1,100	0	2,279
	Water Transmission, CalTrans	485	50	25	0	0	0	0	25	0	560
Water Transmission System - O&M Fund		689	1,285	2,275	1,290	2,200	1,450	3,500	10,715	100	12,790
	Water Transmission	689	1,285	2,275	1,290	2,200	1,450	3,500	10,715	100	12,790
Water Supply - Warm Springs Dam		9,068	856	3,883	8,823	3,161	0	0	15,867	0	25,791
	Other	9,068	856	3,883	8,823	3,161	0	0	15,867	0	25,791
Zone 1A Flood Control		712	271	275	436	69	0	0	780	0	1,763
	Zone 1A	113	50	0	236	69	0	0	305	0	468
	Zone 1A, DWR	599	221	. 275	200	0	0	0	475	0	1,295
Zone 2A Flood Control		19	1,404	500	0	0	0	0	500	0	1,924
	Zone 2A	0	648	500	0	0	0	0	500	0	1,148

Division/Section	Funding Source	Prior FYs	Current FY	FY1 2015-16	FY2 2016-17	FY3 2017-18	FY4 2018-19	FY5 2019-20	5YR Total	Future Yrs	Project Total
	Zone 2A, DWR	19	756	0	0	0	0	0	0	0	776
Zone 3A Flood Control		770	1,280	0	2,500	300	0	0	2,800	0	4,850
	Zone 3A	288	391	0	0	0	0	0	0	0	679
	Zone 3A, DWR	482	889	0	2,500	300	0	0	2,800	0	4,171
Airport-Larkfield-Wikiup Sanitation Zone		34	600	500	0	200	0	0	700	200	1,534
	ALWSZ	34	600	500	0	200	0	0	700	200	1,534
Geyserville Sanitation Zone		0	0	115	15	15	15	15	175	30	205
	GSZ	0	0	115	15	15	15	15	175	30	205
Occidental County Sanitation Dist.		319	775	700	4,600	325	0	0	5,625	0	6,719
	OCSD	319	775	700	4,600	325	0	0	5,625	0	6,719
Penngrove Sanitation Zone		0	0	285	385	30	30	30	760	60	820
	PSZ	0	0	285	385	30	30	30	760	60	820
Russian River County Sanitation Dist.		681	130	230	230	230	230	230	1,150	13,000	14,961
	Other	681	30	30	30	30	30	30	150	8,700	9,561
	RRCSD	0	100	200	200	200	200	200	1,000	4,300	5,400
Sea Ranch Sanitation Zone		0	40	40	40	40	40	40	200	0	240
	SRSZ	0	40	40	40	40	40	40	200	0	240
Sonoma Valley County Sanitation Dist.		2,623	6,593	4,456	5,775	6,395	5,640	5,400	27,666	11,650	48,532
	Other	0	0	0	400	2,000	0	0	2,400	0	2,400
	SVCSD	1,783	4,602	1,755	5,290	4,395	5,640	5,400	22,481	11,650	40,516
	SVCSD, BOR	618	1,806	200	0	0	0	0	200	0	2,624
	SVCSD, DWR	222	185	2,500	85	0	0	0	2,585	0	2,992
South Park County Sanitation Dist.		340	2,571	0	425	3,000	140	0	3,565	0	6,476
	SPCSD	340	2,571	0	425	3,000	140	0	3,565	0	6,476
General Fund		183	0	112	0	0	0	0	112	0	295
	Sustainability-Renewable Energy Fund	183	0	112	0	0	0	0	112	0	295

Division/Section	Funding Source	Prior FYs	Current FY	FY1 2015-16	FY2 2016-17	FY3 2017-18	FY4 2018-19	FY5 2019-20	5YR Total	Future Yrs	Project Total
Internal Services Fund		923	2,166	963	200	201	320	320	2,004	320	5,413
	Facilities Fund	916	1,801	0	200	201	320	320	1,041	320	4,078
	Power Resources	7	365	963	0	0	0	0	963	0	1,335
Grand Total:		24,229	45,171	28,680	38,932	24,875	27,604	40,321	160,411	42,010	271,822

Water Transmission System

Current Five-Year Plan:

This five-year plan includes funding for 44 projects related to the water transmission system. This list of projects also includes construction projects required by the Biological Opinion. The projects identified in this section of the plan meet the objectives in Water Supply Goals and Strategies of the Water Agency's Strategic Plan.

Changes from Prior Plans:

Common Facilities:

Twelve new projects, consisting of Collectors 3, 4, and 5 Pump Discharge Valves, Collector 5 Motor and Discharge Head Replacements, Collector 6 Valves Vault, Mirabel Chlorine Building Water Line, Mirabel Chlorine Lines Replacement, Mirabel Storage Building, pH Pump Replacement, RDS Pumps Replacement, Seismic Hazard Mitigation at River Diversion Structure – Structural, Wohler Motor Replacements, SCADA Software and Hardware, and SCADA Upgrade, were added to the F.Y. 2015-16 through F.Y. 2019-20 capital plan for Common Facilities. The formerly identified Air Valve Replacements project will be complete in 2015.

Pipeline Facilities:

One new project, Calabasas Creek Crossing, was added to the F.Y. 2015-16 through F.Y. 2019-20 capital plan for Pipeline Facilities.

Storage Facilities:

No new projects were added to the F.Y. 2015-16 through F.Y.2019-20 capital plan for Storage Facilities. The formerly identified Oakmont Pipeline Replacement project was completed in 2014, and the Central Reliability Booster Pump Station has been withdrawn pending construction of the Kawana to SBS Pipeline.

Agency Fund:

No new projects were added to the F.Y. 2015-16 through F.Y.2019-20 capital plan for Water Agency Fund. The formerly identified River Diversion Structure Liquefaction Mitigation project was completed in 2014.

Collector 3 & 5 Liquefaction Mitigation

Request #: WA04048 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2010

Division/Section: Water Transmission System - Common Facilities Fund **End Date:** 06/30/2020

Description:

The project will address potential for structural failure by mitigating the potential for liquefaction induced lateral spread by ground improvements, structural upgrades, or through a combination of approaches. This project increases the factor of satey for future seismic events.



Project C	ost
Acquisition:	(
Construction:	10,033
Furniture/Reloc:	C
Design/PM:	1,099
Other:	313
Project Total:	11,445

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Personnel: 0 **Revenue/Refund:** 0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	453	592	0	200	200	5,000	5,000	10,400	0	11,445
TOTALS:		453	592	0	200	200	5,000	5,000	10,400	0	11,445

Net Impact On Operating Budget:

Collector 3, 4, 5 Pump Discharge Valves

Request #: WA15009 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2015Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

The hydraulic pump discharge valves are coming to the end of their useful life. The hydraulic valves are oil driven valves and need to be replaced with water actuated Cla-Val type, pump discharge valves. The hydraulic valves use electricity for the compressors that provide the air over fluid pressure and hydraulic fluid to drive the pistons that open and close the pump discharge valves. By eliminating the compressors and hydraulic fluid, we will save money on electricity and decrease the chance of contamination to the water system, with hydraulic fluid.

The plan is to retrofit (2) valves per year, in each Caisson, for a total of (6) valves in three years.



Project Cost										
Acquisition:	0									
Construction:	570									
Furniture/Reloc:	0									
Design/PM:	30									
Other:	0									
Project Total:	600									

O and M C	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	0	200	200	0	200	0	600	0	600
TOTALS:	-1	0	0	200	200	0	200	0	600	0	600

Collector 5 Motor & Discharge Head Replacements

Request #: WA15006 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2016Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2018

Description:

Two motors and discharge heads in Collector #5 are coming to the end of their useful life. The motors are 30 years old and are a different brand and base size than the rest of the motors at Mirabel. The motors also weigh 60% more than other motors which makes it more difficult to change them out in an emergency (requiring specific rigging and tools). Since the present motors have a different base size and configuration to them, installation of an adapter plate between the motor and discharge head is necessary in order to use any other type of motor.

The project will change out the discharge heads to the standard configurations that are used in the other collector wells and purchase new high efficiency motors that are the same configuration as the motors, used in the other Collectors.



Project C	Project Cost										
Acquisition:	0										
Construction:	480										
Furniture/Reloc:	0										
Design/PM:	20										
Other:	0										
Project Total:	500										

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33093200	0	0	0	500	0	0	0	500	0	500
TOTALS:	'	0	0	0	500	0	0	0	500	0	500

Collector 6 Valves Vault

Request #: WA15008 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2014Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

The Collector 6 valve vault project will install a new vault around two existing shutoff valves located along the 20" and 24" discharge pipes at Collector 6. The new vault is required to facilitate needed repairs and maintenance on the valves.



Project C	ost
Acquisition:	C
Construction:	225
Furniture/Reloc:	C
Design/PM:	25
Other:	C
Project Total:	250

O and M Co	ost
Utilities:	C
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	150	100	0	0	0	0	100	0	250
TOTALS:	'	0	150	100	0	0	0	0	100	0	250

Emergency Wells (Hazard Reliability Water Supply)

Request #: WA14001 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2017Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2021

Description:

The purpose of this project is to construct emergency water supply wells in close proximity to the Water Agency's transmission system that could be activated in response to a natural hazard event that has isolated portions of the Water Agency's service area from the Russian River diversion facilities. The cost estimate preliminarily assumes the installation of two to three wells at locations that are not currently known.



Project Cost									
Acquisition:	250								
Construction:	3,750								
Furniture/Reloc:	(
Design/PM:	750								
Other:	250								
Project Total:	5,000								

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	0	0	0	333	333	333	1,000	4,000	5,000
TOTALS:		0	0	0	0	333	333	333	1,000	4,000	5,000

Mirabel - River Road Fiber Optic Line

Request #: WA14009 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

Install new fiber optic cable within existing conduit (abandoned chlorine solution line), between River Road Chlorine building and Collector 5, in order to upgrade the information and signal expansion that is needed for the Wohler and Mirabel area.



Project Cost								
Acquisition:	0							
Construction:	200							
Furniture/Reloc:	0							
Design/PM:	50							
Other:	0							
Project Total:	250							

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	250	0	0	0	0	0	C	0	250
TOTALS:		0	250	0	0	0	0	0	C	0	250

Mirabel Chlorine Building Water Line

Status:

Start Date:

Active

07/01/2015

Request #: WA15010 Status: Funded

Function: Development Services

Department: Water Agency

Division/Section: Water Transmission System - Common Facilities Fund **End Date:** 06/30/2017

Description:

Construct new waterline for Collector well No. 3 to service the Mirabel Chlorination Building.



Project Cost									
0									
140									
0									
10									
0									
150									

	O and M	Cost
)	Utilities:	0
)	Maintenance	0
)	Other:	0
)		
)		
)	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	0	0	150	0	0	0	150	0	150
TOTALS:		0	0	0	150	0	0	0	150	0	150

Mirabel Chlorine Lines Replacement

Request #: WA15011 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2015Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

Replace the existing chlorine solution pipelines that have reached the end of their useful life at the Mirabel Production Facility



Project Cost									
Acquisition:	0								
Construction:	175								
Furniture/Reloc:	0								
Design/PM:	50								
Other:	25								
Project Total:	250								

O and M	Cost
Utilities:	C
Maintenance	C
Other:	C
OM Total:	C
	Utilities: Maintenance Other:

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	0	250	0	0	0	0	250	0	250
TOTALS:	•	0	0	250	0	0	0	0	250	0	250

Mirabel Storage Building

Request #: WA15012 Status: Funded

Function: Development Services

Status:

Request

Department: Water Agency

Start Date:

07/01/2015

Division/Section:

Water Transmission System - Common Facilities Fund

End Date:

06/30/2016

Description:

Provide a pre-engineered metal storage building at the Mirabel site for maintenance related operations.



Project Cost									
Acquisition:	0								
Construction:	180								
Furniture/Reloc:	0								
Design/PM:	50								
Other:	20								
Project Total:	250								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	0	250	0	0	0	0	250	0	250
TOTALS:	•	0	0	250	0	0	0	0	250	0	250

Mirabel Surge Tanks

Request #: WA08053 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2018

Description:

To reduce the risks of pipeline ruptures/leaks due to transient pressures in the water transmission system following power failures, construct surge control system at the Mirabel production facilities, including three 8,000 gallon surge tanks and appurtenant equipment and controls.



Project Cost									
Acquisition:	0								
Construction:	1,770								
Furniture/Reloc:	0								
Design/PM:	352								
Other:	195								
Project Total:	2,317								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	17	200	0	100	2,000	0	0	2,100	0	2,317
TOTALS:		17	200	0	100	2,000	0	0	2,100	0	2,317

pH Pump Replacement

Request #: WA15013 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2014Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

Upgrade the pumps and PLC in both Wohler and Mirabel caustic soda (pH) buildings, to make them more efficient and program-compatible with forthcoming electronic and SCADA master plans. The pumps and PLC will replace existing equipment.



Project Cost								
Acquisition:	(
Construction:	190							
Furniture/Reloc:	(
Design/PM:	10							
Other:	(
Project Total:	200							

O and M C	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	32003200	0	100	100	0	0	0	0	100	0	200
TOTALS:		0	100	100	0	0	0	0	100	0	200

RDS Pumps Replacement

Request #: WA15014 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2014Division/Section:Water Transmission System - Common Facilities FundEnd Date:07/01/2016

Description:

Replace the three pumps, and associated pump column piping, with new high efficient pumps to ensure reliability in the RDS building. These pumps are used to pump water to the settling and infiltration ponds.



Project Cost					
Acquisition:	(
Construction:	450				
Furniture/Reloc:	C				
Design/PM:	50				
Other:	C				
Project Total:	500				

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	350	150	0	0	0	0	150	0	500
TOTALS:	'	0	350	150	0	0	0	0	150	0	500

System-wide Meter Replacements

Request #: WA08056 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

To comply with regulations limiting material constituents contained within infrastructure that is in direct contact with drinking water, replace 150-175 flow meters throughout the water transmission system.



Project Cost				
Acquisition:	(
Construction:	2,203			
Furniture/Reloc:	(
Design/PM:	11			
Other:	(
Project Total:	2,213			

O and M	Cost
Utilities:	0
Maintenance	C
Other:	C
OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	1,463	450	300	0	0	0	0	300	0	2,213
TOTALS:		1,463	450	300	0	0	0	0	300	0	2,213

Wohler Motor Replacements

Request #: WA15015 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2014Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2016

Description:

Purchase new replacement, high efficiency electric motors for existing Collectors 1 & 2 pumps.



Project Cost				
Acquisition:	(
Construction:	320			
Furniture/Reloc:	(
Design/PM:	30			
Other:	(
Project Total:	350			

O and M Cost						
Utilities:	0					
Maintenance	0					
Other:	0					
OM Total:	0					

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	350	0	0	0	0	0	C	0	350
TOTALS:		0	350	0	0	0	0	0	C	0	350

Mirabel Fish Screen and Fish Ladder Replacement

Request #: WA09057 Status: Funded/Funded by Others

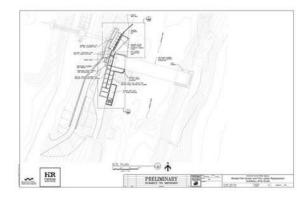
Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2008

Division/Section: Water Transmission System - Common Facilities Fund **End Date:** 6/30/2016

Description:

This multi-element project at the Mirabel Diversion Facilities will replace the fish screen as required by the 2008 NMFS Biological Opinion; upgrade the fish ladder to contemporary standards; enhance monitoring, viewing, and educational opportunities; and improve access for operational and maintenance purposes and ADA compliance.

Replacement of the Fish Screen is required by the 2008 NMFS Biological Opinion (BO) in order to avoid impingement or stranding of listed salmonids. A modified fish ladder will provide attractive flow to fish, eliminating delays in fish passage due to unattractive flow conditions over the Mirabel Inflatable Dam and eliminating the need to alter dam inflation to accommodate fish passage.



Project Cost						
Acquisition:	58					
Construction:	15,672					
Furniture/Reloc:	0					
Design/PM:	2,052					
Other:	367					
Project Total:	18,149					

_		
	O and M	Cost
3	Utilities:	0
2	Maintenance	0
)	Other:	0
2		
7		
)	OM Total:	0

Personnel: 0
Revenue/Refund: 0

Funding Source Current FY FY1 2015-FY2 2016-FY3 2017-FY4 2018-FY5 2019-5YR Total Future YRs Project Dept ID Prior FYs 16 17 18 19 20 Total Water Transmission, CDFW 675421 14,345 1,500 0 0 1,500 18,292 2,447 0 0 0 0 TOTALS: 2,447 14,345 1,500 1,500 18,292

Net Impact On Operating Budget:

Isolation Valve Seismic Hazard Mitigation

Request #: WA09052 Status: Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2009Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2017

Description:

Install additional isolation valves at strategic locations throughout the water supply transmission system to enhance system reliability following a seismic event. The project will facilitate repairs in the event of a rupture.



Project Cost					
Acquisition:	485				
Construction:	3,808				
Furniture/Reloc:	C				
Design/PM:	748				
Other:	62				
Project Total:	5,104				

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission, FEMA PDM	33043200	223	820	3,560	500	0	0	0	4,060	0	5,104
TOTALS:		223	820	3,560	500	0	0	0	4,060	0	5,104

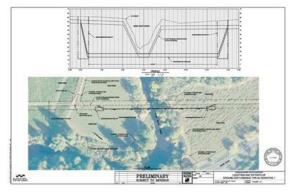
Seismic Hazard Mitigation at the Mark West Creek Crossing

Request #: WA09051 Status: Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2017

Description:

Project will mitigate pipe failure due to seismic induced ground deformation by installing a new ipieline crossing below vulnerable soil layers.



Project Cost								
Acquisition:	215							
Construction:	5,420							
Furniture/Reloc:	(
Design/PM:	1,005							
Other:	166							
Project Total:	6,806							

O and M Cost									
Utilities:	0								
Maintenance	0								
Other:	0								
OM Total:	0								

Net Impact On Operating Budget:

Personnel: 0

Revenue/Refund: 0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission, FEMA PDM	33043200	737	424	200	5,345	100	0	0	5,645	0	6,806
TOTALS:	'	737	424	200	5,345	100	0	0	5,645	0	6,806

Collector 6 Liquefaction Mitigation

Request #: WA07046 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2011Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2021

Description:

The project will address potential for structural failure by mitigating the potential for liquefaction induced lateral spread by ground improvements, structural upgrades, or through a combination of approaches. The goal of this project is to increase the Factor of safetey for seismic events.



Project Cost								
Acquisition:	0							
Construction:	5,147							
Furniture/Reloc:	0							
Design/PM:	553							
Other:	285							
Project Total:	5,985							
Project Total:	5,985							

O and M Cost							
Utilities:	0						
Maintenance	0						
Other:	0						
OM Total:	0						

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	285	0	0	400	100	5,000	5,500	200	5,985
TOTALS:	•	0	285	0	0	400	100	5,000	5,500	200	5,985

SCADA Software and Hardware

Request #: WA15007 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2014

Division/Section: Water Transmission System - Common Facilities Fund **End Date:** 06/30/2016

Description:

The scope of the project is to upgrade SCADA workstations and software to current supported versions. Other objectives include upgrades to field components such as Programmable Logic Controllers and Remote Telemetry devices.



Project Cost									
0									
0									
0									
0									
750									
750									

	O and M Cost										
)	Utilities:	0									
)	Maintenance	0									
)	Other:	0									
)											
)											
)	OM Total:	0									

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	750	0	0	0	0	0	C	0	750
TOTALS:		0	750	0	0	0	0	0	C	0	750

SCADA Upgrade

Request #: WA15005 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2014

Division/Section: Water Transmission System - Common Facilities Fund **End Date:** 06/30/2016

Description:

The scope of this project is to reassess and revamp programming standards to accommodate current technologies as well as implement these new standards to streamline maintenance and operations.



Project Cost								
Acquisition:	(
Construction:	C							
Furniture/Reloc:	C							
Design/PM:	C							
Other:	1,250							
Project Total:	1,250							

O and M	Cost
Utilities:	C
Maintenance	C
Other:	C
OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	C	1,250	0	0	0	0	0	C	0	1,250
TOTALS:		0	1,250	0	0	0	0	0	C	0	1,250

Seismic Hazard Mitigation at River Diversion Structure - Structural

Request #: WA15001 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2017Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2019

Description:

This natural hazard reliability project will retrofit the pumphouse portin of the River Diversion Structure to midigate the risk of structural failure durring a major earthquake.



Project Cost									
Acquisition:	(
Construction:	2,590								
Furniture/Reloc:	(
Design/PM:	500								
Other:	300								
Project Total:	3,390								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0
1	I

Personnel: 0 **Revenue/Refund:** 0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	0	0	275	250	2,785	80	3,390	0	3,390
TOTALS:		0	0	0	275	250	2,785	80	3,390	0	3,390

Seismic Hazard Mitigation at the Russian River Crossing

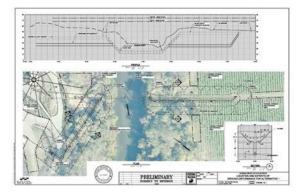
Request #: WA09055

Status: Partially Funded/Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:04/01/2011Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2017

Description:

Project will mitigate pipe failure due to liquefaction induced lateral spread by lowering at-risk portions of the pipe below liquefiable soil layers.



Project Cost									
Acquisition:	191								
Construction:	4,640								
Furniture/Reloc:	0								
Design/PM:	991								
Other:	209								
Project Total:	6,032								

O and M C	ost
Utilities:	C
Maintenance	C
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission, FEMA PDM	33043200	665	376	320	4,670	0	0	0	4,990	0	6,032
TOTALS:		665	376	320	4,670	0	0	0	4,990	0	6,032

Dry Creek Habitat Enhancement (Miles 4 - 6)

Request #: WA14025 Status: Unfunded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2015Division/Section:Water Transmission System - Common Facilities FundEnd Date:06/30/2023

Description:

To address fish habitat issues associated with high flows in Dry Creek, as indicated in the Biological Opinion, this project will construct modifications designed to enhance fish habitat in Dry Creek while accommodating stream flows necessary to support water supply.



Project Cost									
2,150									
22,000									
C									
5,040									
810									
30,000									

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0
	I

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043200	0	3,000	1,000	732	675	6,621	16,072	25,100	1,900	30,000
TOTALS:		0	3,000	1,000	732	675	6,621	16,072	25,100	1,900	30,000

Westside Facility

Request #: WA07045 Status: Funded

Function: Development Services

Status: Active

06/30/2016

Department: Water Agency

Start Date: 07/01/2011

End Date:

Description:

Division/Section:

Construct a multi-purpose building facility adjacent the Russian River, at Westside Road and the Wohler Bridge, including public education, fisheries, and public restroom facilities.

Water Transmission System - Common Facilities Fund/General



Project Cost									
Acquisition:	0								
Construction:	2,424								
Furniture/Reloc:	0								
Design/PM:	407								
Other:	105								
Project Total:	2,936								

O and M Cost									
Utilities:	C								
Maintenance	C								
Other:	C								
OM Total:	C								

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
General Fund	33010100	254	1,702	80	0	0	0	0	80	0	2,036
Water Transmission	33043200	305	595	0	0	0	0	0	C	0	900
TOTALS:		559	2,297	80	0	0	0	0	80	0	2,936

MSN C2 - Hwy 101 HOV Lane (Lakeville to Old Redwood Hwy)

Request #: WA14026 Status: Funded

Function: Development Services

Department: Water Agency

Status: Request Start Date: 07/01/2015

Division/Section: Water Transmission System - Pipeline Fund

End Date: 06/30/2018

Description:

Relocate existing 33" Petaluma Aqueduct crossing under Highway 101 (at Railroad crossing) to accommodate Caltrans HOV lane project.



Project Cost									
Acquisition:	140								
Construction:	3,485								
Furniture/Reloc:	0								
Design/PM:	330								
Other:	145								
Project Total:	4,100								

_		
	O and M	Cost
	Utilities:	C
	Maintenance	C
	Other:	C
	OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	0	0	0	50	50	4,000	0	4,100	0	4,100
TOTALS:		0	0	0	50	50	4,000	0	4,100	0	4,100

SBS Storage Building

Request #: WA14008 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013

Division/Section: Water Transmission System - Pipeline Fund **End Date:** 06/30/2018

Description:

Provide a pre-engineered metal storage building at the site of the Sonoma Booster Pump Station for maintenance related operations.



Project Cost									
(
220									
(
25									
10									
255									

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	5	150	100	0	0	0	0	100	0	255
TOTALS:		5	150	100	0	0	0	0	100	0	255

Sonoma Booster Pump Station Upgrade

Request #: WA08062 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2017

Description:

This project is a natural hazard reliability project to replace two pipelines in the vicinity of the Sonoma Booster Station, a 20-inch diameter pipeline along the Sonoma Aqueduct and a 24-inch diameter pipeline along the Oakmont pipeline with lengths to be determined. The replacement pipelines are designed to increase system reliability where they cross the Bennett Valley fault systemand to withstand a major seismic event without rupture.



Project Cost									
Acquisition:	11								
Construction:	5,580								
Furniture/Reloc:	0								
Design/PM:	891								
Other:	12								
Project Total:	6,494								

O and M	Cost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission		269	375	5,710	140	0	0	0	5,850	0	6,494
TOTALS:		269	375	5,710	140	0	0	0	5,850	0	6,494

Bennett Valley Fault Crossing

Request #: WA10106 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2015Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2020

Description:

Implement measures to mitigate the risk of pipeline rupture in the vicinity where the Sonoma Aqueduct and Oakmont Pipeline traverse the Bennett Valley Fault in Rincon Valley.



Project Cost									
Acquisition:	80								
Construction:	3,200								
Furniture/Reloc:	(
Design/PM:	680								
Other:	40								
Project Total:	4,000								

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	0	0	100	50	300	350	3,200	4,000	0	4,000
TOTALS:		0	0	100	50	300	350	3,200	4,000	0	4,000

Calabasas Creek Crossing

Request #: WA15002 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2019Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2023

Description:

The 20-inch Sonoma aquaduct crosses Calabasas Creek near Sylvia drive off Sonoma Highway in Glen Ellen. The location has very high susceptability to liquefaction and a high susceptability to lateral spread hazard. The overall lateral spread potential is high with approximately 3 feet of lateral spread at the location of the pipeline. As a result, the pipeline has a high risk of failure. This natural hazard reliability project will modify the pipeline crossing to mitigate the risk of rupture during a major earthquake.



Project Cost									
Acquisition:	50								
Construction:	2,000								
Furniture/Reloc:	(
Design/PM:	400								
Other:	50								
Project Total:	2,500								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0
	1

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015-	FY2 2016-	FY3 2017-	FY4 2018-	FY5 2019-	5YR Total	Future YRs	Project
				16	17	18	19	20			Total
Water Transmission	33043100	0	0	0	0	0	0	150	150	2,350	2,500
TOTALS:		0	0	0	0	0	0	150	150	2,350	2,500

Petaluma River Crossing (Petaluma Aqueduct)

Request #: WA14006 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2018Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2022

Description:

The 33-inch Petaluma aqueduct crosses the Petaluma River close to Highway 101. This crossing has a high susceptibility for liquefaction and lateral spread hazard with expected lateral spread displacements on the order of 3 feet. As a result, the existing pipeline has a high risk of failure. The new 33-inch diameter pipeline, with length to be determined, is a natural hazard reliability project that will be designed to withstand a major seismic event.



Project Cost									
Acquisition:	250								
Construction:	4,350								
Furniture/Reloc:	(
Design/PM:	650								
Other:	250								
Project Total:	5,500								
l .	ı								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0
	1

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	0	0	0	0	0	100	600	700	4,800	5,500
TOTALS:		0	0	0	0	0	100	600	700	4,800	5,500

Santa Rosa Creek Crossing

Request #: WA14003 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2018Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2022

Description:

The 36-inch Santa Rosa aqueduct crosses the Santa Rosa Creek near Sonoma Avenue. Although Santa Rosa Creek is deeply incised into the fan deposits at the pipeline undercrossing, the steep stream banks are above the groundwater level and composed predominately of fine-grained alluvial fan deposits. In addition, the creek has locally been modified. Due to the high level of ground shaking that can be expected from rupture on the nearby Rodgers Creek fault, local failure of stream banks could occur. The projet proposess to relocate the existing pipeline away from the open stream channel with an alignment that remains within the public roadway, including a trenchless crossing beneath the sanrta rosa creek colvert.



Project Cost									
Acquisition:	80								
Construction:	4,000								
Furniture/Reloc:	0								
Design/PM:	720								
Other:	200								
Project Total:	5,000								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	0	0	400	200	4,400	0	0	5,000	0	5,000
TOTALS:	•	0	0	400	200	4,400	0	0	5,000	0	5,000

Sonoma Creek Crossing (Lawndale/Madrone)

Request #: WA14004 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2018Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2022

Description:

The Sonoma Aqueduct crosses Sonoma Creek both at Lawndale Road (20-inch diameter) and Madrone Road (16-inch diameter) off Sonoma Highway utilizing overhead spans (pedestrian bridge/steel truss) with structural connections that make the pipeline susceptible to failure during a major seismic event. Liquefaction and lateral spread displacements will likely cause the pipeline to fail due to minor differential movement or settlement. The proposed project is a natural hazard reliability project that will provide structural modifications to the support structures and pipeline in order to withstand a major seismic event.



Project Cost									
Acquisition:	60								
Construction:	1,200								
Furniture/Reloc:	(
Design/PM:	180								
Other:	60								
Project Total:	1,500								

O and M Cost									
Utilities:	C								
Maintenance	C								
Other:	C								
OM Total:	C								

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	0	0	0	0	0	100	150	250	1,250	1,500
TOTALS:		0	0	0	0	0	100	150	250	1,250	1,500

Sonoma Creek Crossing (Verano Ave)

Request #: WA14005 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2018Division/Section:Water Transmission System - Pipeline FundEnd Date:06/30/2022

Description:

The 16-inch Sonoma aqueduct crosses Sonoma Creek near Verano Avenue off Sonoma Highway. The pipeline is suspended from the bridge deck. This location has a moderate to high susceptibility for liquefaction and a high susceptibility for lateral spread. The overall potential for lateral spread is also judged to be high at this location with lateral spread displacement on the order of 3 feet. As a result, the pipeline at this location is judged to be vulnerable with a high risk of failure. A new 16-inch pipeline, with length preliminarily estimated at up to 1000 feet of trenchless installation, is intended as a natural hazard reliability project designed to withstand a major seismic event. A smaller scale project to mitigate the hazard by adding flexibility to the pipeline joints may be determined to be feasible upon further investigation.



Project Cost									
Acquisition:	100								
Construction:	2,000								
Furniture/Reloc:	0								
Design/PM:	300								
Other:	100								
Project Total:	2,500								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043100	0	0	0	0	0	150	200	350	2,150	2,500
TOTALS:		0	0	0	0	0	150	200	350	2,150	2,500

Kawana to SBS Pipeline

Request #: WA96089 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2002

Division/Section: Water Transmission System - Storage Fund **End Date:** 06/30/2026

Description:

Predesign engineering, gradient study and environmental impact assessment. Construction of approximately 3 miles of water transmission pipeline, between the Kawana Tanks, Ralphine Tanks, and the Sonoma Booster Pump Station. The pipeline will provide redundancy and reliability to the system should repairs or replacement be necessary or if a catastrophic event occurs.



Project Cost									
Acquisition:	0								
Construction:	0								
Furniture/Reloc:	0								
Design/PM:	597								
Other:	250								
Project Total:	847								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043000	536	311	0	0	0	0	0	0	0	847
TOTALS:		536	311	0	0	0	0	0	0	0	847

Ralphine Tanks - Flow Thru Conversion

Request #: WA11072 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Water Transmission System - Storage FundEnd Date:06/30/2017

Description:

Reconfigure piping connecting the four above ground steel water reservoirs at the Ralphine Tank farm to improve water circulation/turnover for enhanced water quality and provide surge protection.



Project Cost									
Acquisition:	12								
Construction:	1,130								
Furniture/Reloc:	0								
Design/PM:	265								
Other:	25								
Project Total:	1,431								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043000	8	322	0	1,100	0	0	0	1,100	0	1,431
TOTALS:		8	322	0	1,100	0	0	0	1,100	0	1,431

Kastania Pipeline Relocation (Caltrans)

Request #: WA05070 Status: Funded/Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2010Division/Section:Water Transmission System - Storage FundEnd Date:06/30/2016

Description:

Relocate approximately 3000 feet of the existing Petaluma Aqueduct in the vicinity of South Petaluma Blvd. and Kastania Rd. to facilitate Caltrans construction of a new freeway interchange.



Project Cost									
Acquisition:	36								
Construction:	146								
Furniture/Reloc:	0								
Design/PM:	369								
Other:	9								
Project Total:	560								
	1								

	O and M	Cost
•	Utilities:	C
•	Maintenance	C
)	Other:	C
,		
)	OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission, CalTrans	33043000	485	50	25	0	0	0	0	25	0	560
TOTALS:		485	50	25	0	0	0	0	25	0	560

Collector 6 Chlorine Solution Lines

Request #: WA08050 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012

Division/Section: Water Transmission System - O&M Fund **End Date:** 06/30/2016

Description:

Replace the existing chlorine solution pipelines between the Wohler plant and Collector 6 with a pipe material more resistant against corrosive degradation.



Project Cost								
Acquisition:	(
Construction:	74							
Furniture/Reloc:	(
Design/PM:	10							
Other:	(
Project Total:	84							
l .								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33040100	4	. 80	0	0	0	0	0	C	0	84
TOTALS:		4	. 80	0	0	0	0	0	C	0	84

Cotati 3 Tank Coating Recoat

Request #: WA08061 Status: Funded

Function:Development ServicesStatus:Department:Water AgencyStart Date:

Division/Section: Water Transmission System - O&M Fund **End Date:** 06/30/2021

Description:

To prevent corrosion, recoat interior and exterior surfaces of an 18 MG water reservoir (above ground welded steel tank) and replace cathodic protection system.



Project Cost									
Acquisition:	C								
Construction:	3,800								
Furniture/Reloc:	C								
Design/PM:	300								
Other:	C								
Project Total:	4,100								

Active

07/01/2013

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33040100	0	0	300	0	0	200	3,500	4,000	100	4,100
TOTALS:		0	0	300	0	0	200	3,500	4,000	100	4,100

Forestville Tanks Recoat

Request #: WA14010 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2014Division/Section:Water Transmission System - O&M FundEnd Date:06/30/2016

Description:

This project will remove the interior and exterior coatings to reline and recoat the existing 1MG and 0.3MG Forestville Tanks with new epoxy coatings. The project will also include replacement of the cathodic protection system.



Project Cost									
Acquisition:	(
Construction:	451								
Furniture/Reloc:	(
Design/PM:	48								
Other:	2								
Project Total:	500								

	O and M	Cost
)	Utilities:	0
l	Maintenance	0
)	Other:	0
3		
2		
)	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33043000	0	500	0	0	0	0	0	0	0	500
TOTALS:		0	500	0	0	0	0	0	0	0	500

Kastania Tank Recoat

Request #: WA09059 Status: Funded

Function:Development ServicesStatus:Department:Water AgencyStart Date:

Division/Section: Water Transmission System - O&M Fund **End Date:** 06/30/2017

Description:

To prevent corrosion, recoat interior and exterior surfaces of a 12 MG water reservoir (above ground welded steel tank) and replace cathodic protection system, including removal of coal-tar interior coating.



Project Cost									
Acquisition:	0								
Construction:	3,100								
Furniture/Reloc:	0								
Design/PM:	195								
Other:	5								
Project Total:	3,300								

Active

07/01/2014

_		
	O and M	Cost
)	Utilities:	0
)	Maintenance	0
)	Other:	0
5		
i		
)	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	675108	0	300	200	300	1,250	1,250	0	3,000	0	3,300
TOTALS:		0	300	200	300	1,250	1,250	0	3,000	0	3,300

Mirabel Infiltration Ponds 2 & 3 Rehabilitation

Request #: WA10058 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2015Division/Section:Water Transmission System - O&M FundEnd Date:06/30/2017

Description:

Rehabilitate the infiltration ground surface of Infiltration Ponds 2 & 3 at the Mirabel water production facility to remove silt and restore infiltration capacity.



Project C	ost
Acquisition:	(
Construction:	950
Furniture/Reloc:	C
Design/PM:	50
Other:	C
Project Total:	1,000

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33040100	0	0	1,000	0	0	0	0	1,000	0	1,000
TOTALS:		0	0	1,000	0	0	0	0	1,000	0	1,000

Petaluma Aqueduct Cathodic Protection

Request #: WA05066 Status: Funded

Function: Development Services

Status:

Active

Department: Water Agency

ency Start Date:

End Date:

07/01/2009 06/30/2018

Description:

Division/Section:

Upgrade the Petaluma Aqueduct cathodic protection system to an impressed curent system.

Water Transmission System - O&M Fund



Project Cost										
Acquisition:	72									
Construction:	927									
Furniture/Reloc:	0									
Design/PM:	174									
Other:	4									
Project Total:	1,177									

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33040100	207	260	710	0	0	0	0	710	0	1,177
TOTALS:	•	207	260	710	0	0	0	0	710	0	1,177

Russian River - Cotati Intertie Cathodic Protection

Request #: WA09065 Status: Funded

Function: Development Services

Status:

Department: Water Agency

Start Date:

Active

Division/Section:

Water Transmission System - O&M Fund

End Date:

07/01/2013 06/30/2017

Description:

Upgrade the Russian River - Cotati Intertie cathodic protection system to an impressed curent system.



Project Cost								
Acquisition:	25							
Construction:	860							
Furniture/Reloc:	0							
Design/PM:	222							
Other:	95							
Project Total:	1,202							

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	675108	212	25	15	0	950	0	0	965	0	1,202
TOTALS:		212	25	15	0	950	0	0	965	0	1,202

Santa Rosa Aqueduct Cathodic Protection

Request #: WA08064 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Transmission System - O&M FundEnd Date:06/30/2017

Description:

Upgrade the Santa Rosa Acqueduct cathodic protection system to an impressed curent system.



Project Cost									
Acquisition:	45								
Construction:	1,004								
Furniture/Reloc:	(
Design/PM:	367								
Other:	10								
Project Total:	1,426								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Water Transmission	33040100	266	120	50	990	0	0	0	1,040	0	1,426
TOTALS:		266	120	50	990	0	0	0	1,040	0	1,426

Status: Funded

Current Five-Year Plan:

In this five-year plan, the Warm Springs Dam Fund will fund three projects representing three phases of the Dry Creek Habitat Enhancement project, which is part of the implementation of the Biological Opinion. The projects identified in this section of the plan meet the objectives of Water Supply Goals and Strategies and Flood Control Goals and Strategies of the Agency's Strategic Plan.

Changes from prior plans:

No new projects were added to the list of capital projects for the Russian River Projects, Recycled Water Fund, or Warm Springs Dam Fund in the F.Y. 2015-16 through F.Y. 2019-20 capital plan.

Dry Creek Habitat Enhancement Project (Mile 1)

Request #: WA05042 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2009Division/Section:Water Supply - Warm Springs DamEnd Date:06/30/2017

Description:

The Dry Creek Habitat Enhancement Project - MILE 1 is the first mile (demonstration reach) of a 3-6 mile enhancement project within the main stem of Dry Creek, as required by the 2008 NMFS Biological Opinion. The MILE 1 project site is located in and along Dry Creek from approximately ½ mile upstream of Lambert Bridge to ½ mile downstream of Lambert Bridge. The objective of the project is to increase the amount of high quality rearing habitat for juvenile coho and steelhead by implementing enhancement practices that emulate natural geomorphic effects. The primary enhancement approaches planned for the project include the following: Backwater Channels & Ponds; Constructed Riffles; Pool Enhancement; Winter Refuge Enhancement; Log Jams and Large Woody Debris Placement; Boulder Clusters; and Streambank Stabilization, Repair and Construction. The project will most likely require diversion of the creek during construction of some sections, local dewatering, earthwork, shoring, fish screening and relocation, and will likely have permit constraints that will limit work in the stream to a window of time between June 15th and October 15th. Access, staging, right-of-way and strict adherence to permit compliance will need to be considered for construction.



Project Cost									
Acquisition:	715								
Construction:	3,450								
Furniture/Reloc:	0								
Design/PM:	1,573								
Other:	1,480								
Project Total:	7,219								

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Personnel: 0 **Revenue/Refund:** 0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Other	33030100	6,462	110	486	161	0	0	0	647	0	7,219
TOTALS:		6.462	110	486	161	0	0	0	647	0	7 219

Net Impact On Operating Budget:

Dry Creek Habitat Enhancement Project (Mile 2)

Request #: WA08043 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Supply - Warm Springs DamEnd Date:12/30/2018

Description:

As identified in the Russian River Biological Opinion (NMFS, 2008), the Dry Creek Habitat Enhancement Project -MILE 2 (Project) is the second phase of a 3-6 mile enhancement project within the main stem of Dry Creek. The Project site is within the Dry Creek channel and on private properties in an unincorporated area of Sonoma County, California. The objective of the Project is to increase the amount of high quality rearing habitat for juvenile coho and steelhead by implementing enhancement practices that emulate natural geomorphic effects. The primary enhancement approaches planned for the Project include, but are not limited to the following: Backwater Channels & Ponds; Constructed Riffles; Pool Enhancement; Winter Refuge Enhancement; Log Jams and Large Woody Debris Placement; Boulder Clusters; and Streambank Stabilization, Repair and Construction.

The project is currently in planning and design phases. When constructed the project will most likely require diversion of the creek during construction of some sections, local dewatering, earthwork, shoring, fish screening and relocation, and will likely have permit constraints that will limit work in the stream to a window of time between June 15th and October 15th. Access, staging, right-of-way and strict adherence to permit compliance will need to be considered for construction.

Net Impact On Operating Budget:



Project Cost									
Acquisition:	710								
Construction:	6,412								
Furniture/Reloc:	0								
Design/PM:	1,623								
Other:	636								
Project Total:	9,381								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Other	33030100	1,404	500	1,885	3,952	1,639	0	0	7,477	0	9,381
TOTALS:		1,404	500	1,885	3,952	1,639	0	0	7,477	0	9,381

Dry Creek Habitat Enhancement Project (Mile 3)

Request #: WA14023 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Water Supply - Warm Springs DamEnd Date:12/30/2018

Description:

As identified in the Russian River Biological Opinion (NMFS, 2008), the Dry Creek Habitat Enhancement Project -MILE 3 (Project) is the third phase of a 3-6 mile enhancement project within the main stem of Dry Creek. The Project site is within the Dry Creek channel and on private properties in an unincorporated area of Sonoma County, California. The objective of the Project is to increase the amount of high quality rearing habitat for juvenile coho and steelhead by implementing enhancement practices that emulate natural geomorphic effects. The primary enhancement approaches planned for the Project include, but are not limited to the following: Backwater Channels & Ponds; Constructed Riffles; Pool Enhancement; Winter Refuge Enhancement; Log Jams and Large Woody Debris Placement; Boulder Clusters; and Streambank Stabilization, Repair and Construction.

The mile 3 project is currently in planning and design phases. When constructed the project will most likely require diversion of the creek during construction of some sections, local dewatering, earthwork, shoring, fish screening and relocation, and will likely have permit constraints that will limit work in the stream to a window of time between June 15th and October 15th. Access, staging, right-of-way and strict adherence to permit compliance will need to be considered for construction.

Net Impact On Operating Budget:



Project Cost								
Acquisition:	673							
Construction:	6,449							
Furniture/Reloc:	0							
Design/PM:	1,660							
Other:	409							
Project Total:	9,192							

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Other	33030100	1,202	246	1,512	4,710	1,522	0	0	7,744	0	9,192
TOTALS:		1,202	246	1,512	4,710	1,522	0	0	7,744	0	9,192

Flood Control Zones

Current Five-Year Plan:

In this five-year plan, there are two projects identified for funding in Zone 1A, eight projects identified for funding in Zone 2A, and two projects identified for funding in Zone 3A. The Water Agency will not take the lead on all of these projects, but will provide administration services and funding for m any of these projects through the flood control zones. Funding provided by partner entities are not included in the project costs presented in this plan. The projects identified in this section of the plan meet the Objectives of Flood Control Goals and Strategies of the Agency's Strategic Plan.

Changes from Prior Plans:

Zone 1A (Laguna-Mark-West Creek)

No new projects were added to the list of projects for Zone 1A in the F.Y. 2015-16 through F.Y. 2019-20 capital plan. The formerly identified Brush Creek 42A project has been withdrawn for feasibility, and in favor of a non-capital project alternative.

Zone 2A (Petaluma)

One new project, the Petaluma River Flood Control Project, was added to the list of projects for Zone 2A in the F.Y. 2015-16 through F.Y. 2019-20 capital plan. The formerly identified Corona Road Denman Reach (floodwall) project has been withdrawn and modified in scope within the Denman Reach Flood Terrace project.

Zone 3A (Valley of the Moon)

No new projects were added to the list of projects for Zone 3A in the F.Y. 2015-16 through F.Y. 2019-20 capital plan.

Copeland Creek Detention-Recharge & Habitat Restoration - Phase 1

Request #: WA07073 Status: Funded/Funded by Others

Function:Development ServicesStatus:Department:Water AgencyStart Date:

Division/Section: Zone 1A Flood Control **End Date:** 06/30/2016

Description:

An integrated multi-benefit flood control & groundwater recharge project, including construction of detention-recharge elements adjacent Copeland Creek, upstream of Petaluma Hill Road, and habitat restoration downstream to Hwy 101. Phase 1 will implement instream restoration and perform the majority of design and CEQA for the project.



Project Cost									
Acquisition:	10								
Construction:	600								
Furniture/Reloc:	0								
Design/PM:	617								
Other:	68								
Project Total:	1,295								
	ı								

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 1A, DWR	33020100	599	221	275	200	0	0	0	475	0	1,295
TOTALS:		599	221	275	200	0	0	0	475	0	1,295

Santa Rosa Creek Fish Ladder Repair

Request #: WA06074 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2009

Division/Section: Zone 1A Flood Control **End Date:** 06/30/2018

Description:

Repair inlet structure to the Santa Rosa Creek fish ladder to improve function. Currently Available funds will be used to design the project grant funding will be sought to construct the project.



Project Cost									
Acquisition:	4								
Construction:	200								
Furniture/Reloc:	0								
Design/PM:	239								
Other:	25								
Project Total:	468								

O and M Cost									
Utilities:	0								
Maintenance	0								
Other:	0								
OM Total:	0								

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 1A	33020100	113	50	0	236	69	0	0	305	0	468
TOTALS:		113	50	0	236	69	0	0	305	0	468

Adobe Creek Sediment Basin Design

Request #: WA08079 Status: Funded

Function: Development Services

Division/Section: Zone 2A Flood Control

Status: Request

Department: Water Agency

Start Date: 07/01/2014 **End Date:** 06/30/2016

Description:

Funding agreement with Sonoma Resource Conservation District to design a sediment detention feature along Adobe Creek, upstream of the Casa Grande double box culvert.



Project Cost									
Acquisition:	0								
Construction:	0								
Furniture/Reloc:	0								
Design/PM:	108								
Other:	0								
Project Total:	108								

	O and M	Cost
0	Utilities:	(
0	Maintenance	(
0	Other:	(
8		
0		
8	OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A	33020200	0	108	0	0	0	0	0	C	0	108
TOTALS:		0	108	0	0	0	0	0	C	0	108

Kelly Creek @Sunnyslope Avenue Pre-Design

Request #: WA08083 Status: Funded

Function: Development Services

Water Agency

Status: Request
Start Date: 07/01/2014

Division/Section: Zone 2A Flood Control

End Date: 06/30/2016

Description:

Department:

Funding Agreement with City of Petaluma to comence design of a project to reduce localized flooding adversely affecting residential properties and structures adjacent to Kelly Creek downstream of Sunnyslope Avenue by reconnecting the natural, open stream portion of Kelly Creek flows and diverting the piped collection system to an appropriate facility; Improve water quality in the open channel of Kelly Creek by reconnecting the upstream flows from the open channel of Kelly Creek and diverting the contained culvert to the existing culverted system.



Project Cost								
Acquisition:	0							
Construction:	0							
Furniture/Reloc:	0							
Design/PM:	62							
Other:	0							
Project Total:	62							

O and M	Cost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(
	1

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A	33020200	0	62	0	0	0	0	0	(0	62
TOTALS:		0	62	0	0	0	0	0	(0	62

Petaluma River (Corona Reach) Overflow Chl FS

Request #: WA08081 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2014

Division/Section: Zone 2A Flood Control **End Date:** 06/30/2016

Description:

Funding Agreement with City of Petaluma to conduct cost/benefit feasibility analysis and model run for 1) a linear detention channel along the west side of Highway 101 from Corona Road overpass south along the old railroad right-of-way, and 2) modification of the Capri Creek confluence with Petaluma River to reduce flow obstruction.



Project Cost										
0										
0										
0										
122										
0										
122										

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A	33020200	0	122	0	0	0	0	0	C	0	122
TOTALS:		0	122	0	0	0	0	0	C	0	122

Petaluma River Flood Control Project

Request #: WA15017 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2015

Division/Section: Zone 2A Flood Control **End Date:** 06/30/2016

Description:

The Petaluma River Flood Control project included flood improvements to protect properties from a 100-year flood within a 3,600-foot section of the River from Lynch Creek downstream past the Lakeville Street Bridge. The Federally authorized project included an earthen trapezoidal channel transitioning downstream to a steel-pile-lined U-shape channel approximately 200 feet upstream of the Lakeville Street Bridge. Steel sheet-pile flood walls extend along Washington Creek. The project includes a concrete transition weir, two pump stations, two large mitigation sites, replacement of two vehicular bridges, removal of two railroad bridges, replacement of one mainline railroad bridge, and construction of a railroad spur line.

Remaining work includes approximately 200-feet of associated channel widening and transition; approximately 100 linear feet of sheet-pile floodwall in the vicinity of the Lakeville Street Bridge and SMART rail trestle; an embankment repair; and excavation of sediment on the channel bottom to restore design storm carrying capacity.

Zone 2A funds will provide a portion of the federally-required local match to complete the remaining work.



Project Cost									
Acquisition:	0								
Construction:	500								
Furniture/Reloc:	0								
Design/PM:	0								
Other:	0								
Project Total:	500								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Personnel: 0 **Revenue/Refund:** 0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A	33020200	0	0	500	0	0	0	0	500	0	500
TOTALS:		0	0	500	0	0	0	0	500	0	500

Net Impact On Operating Budget:

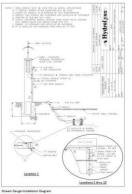
Petaluma River Watershed Stream Gauges

Request #: WA15016 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2015Division/Section:Zone 2A Flood ControlEnd Date:06/30/2016

Description:

In accordance with the recommendation of the Natural Hazard Reliability Assessment, the purpose of this project is to enhance the capabilities to monitor real-time flow rates throughout the water transmission system. The project is currently defined by the scope of the Advanced Metering Infrastructure (AMI) Project, though additional elements to further enhance the "real-time" flow monitoring capabilities may desirable for key locations and added in the future.



Project Cost									
Acquisition:	0								
Construction:	160								
Furniture/Reloc:	0								
Design/PM:	16								
Other:	0								
Project Total:	176								

O and M Co	st
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A	33020200	0	176	0	0	0	0	0	C	0	176
TOTALS:	•	0	176	0	0	0	0	0	C	0	176

Washington Creek Repair & Enhancement

Request

Request #: WA08076 Status: Funded

Development Services Function: Status: Department: Water Agency **Start Date:** 07/01/2014

Division/Section: Zone 2A Flood Control **End Date:** 06/30/2016

Description:

Funding Agreement with City of Petaluma to implement structural repairs and cross-sectional modifications to the Washington Creek corridor to conserve, and where possible, increase flow capacity.



Project Cost										
Acquisition:	0									
Construction:	129									
Furniture/Reloc:	0									
Design/PM:	33									
Other:	18									
Project Total:	180									

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A	33020200	0	180	0	0	0	0	0	C	0	180
TOTALS:		0	180	0	0	0	0	0	C	0	180

Capri Creek Flood Capacity & Habitat Enhancement

Request #: WA08080 Status: Funded/Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Zone 2A Flood ControlEnd Date:12/30/2016

Description:

Funding Agreement with City of Petaluma to conduct design, CEQA, permitting, and grant administration activities for a multi-benefit flood reduction and habitat enhancement project in the Capri Creek sub-basin of the Petaluma watershed. The zone 2A unding provides for local matchservises foor a department of water providers, propostion 84 Grant that will fund construction of the project.

The Capri Creek Project will reduce out-of-bank flooding ta adjacent and downstram residential neighborhoods, improve ability to conduct routine maintenance, introduce a more natura habita within this reach and encourage environmental stewardship.



Project Cost									
0									
0									
0									
227									
0									
227									

O and M Co	ost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A, DWR	33020200	0	227	0	0	0	0	0	C	0	227
TOTALS:		0	227	0	0	0	0	0	C	0	227

Denman Reach Flood Terrace

Request #: WA08077 Status: Funded/Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Zone 2A Flood ControlEnd Date:06/30/2016

Description:

Funding Agreement with City of Petaluma to provide match funding to implement a floodplain modification project to reduce flooding along the Petaluma River. The Zone 2A funding provides for local match services for a department of Department of Water Resources (DWR) Urban Streams Restoration Grant that will help fund construction of the project.

Thw Denman Reach Project will continue the implamentation of the city'r River Acces and Enhancement and General Plan 2015 programs to increase storm water capacit of the Petaluma River and reduce the severity of localized flooding while improving riparian habitat and providing public access



Project Cost								
Acquisition:	(
Construction:	410							
Furniture/Reloc:	(
Design/PM:	138							
Other:	(
Project Total:	549							

O and M Cost							
Utilities:	0						
Maintenance	0						
Other:	0						
OM Total:	0						

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 2A, DWR	33020200	19	529	0	0	0	0	0	C	0	549
TOTALS:		19	529	0	0	0	0	0	C	0	549

City Watersheds of Sonoma Valley - Phase 1

Request #: WA13101 Status: Funded/Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Zone 3A Flood ControlEnd Date:06/30/2018

Description:

A multi-benefit project to provide flood hazard reduction within the Fryer Creek sub-watershed via construction of habitat restorations and enhancements, public trails, interpretive elements, and additional/modified drainage facilities.

The broader storage initicetive, uner which the City Watersheds project is being pursued has as its key objective to implament intendegrated multi-benefit stormwater prijects that reduce flood hazzard and enhance ground water recharge. This Phase 1 City Watershed project is funded under a DWR grant through Propostion 1E.



Project Cost									
Acquisition:	39								
Construction:	2,602								
Furniture/Reloc:	0								
Design/PM:	1,480								
Other:	50								
Project Total:	4,171								

O and M Cost									
Utilities:	0								
Maintenance	0								
Other:	0								
OM Total:	0								

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 3A, DWR	33020300	482	889	0	2,500	300	0	0	2,800	0	4,171
TOTALS:	·	482	889	0	2,500	300	0	0	2,800	0	4,171

Upper Sonoma Creek (Kenwood-Adobe) Project

Request #: WA04087 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2008

Division/Section: Zone 3A Flood Control **End Date:** 06/30/2019

Description:

Funding agreement with Sonoma Ecology Center for pricing and design an integrated multi-benefit demonstration project to address flooding along Sonoma Creek from the Hwy 12 bridge in Kenwood to 0.5 miles downstream and the larger study area consisting of the entire contributing area (Adobe Canyon's alluvial fan). This project will provide a demonstration for future integrated water management projects regarding the integration of flood protection and groundwater recharge. It helps to fulfill the objectives of the Sonoma Creek and Tributaries Sediment TMDL, the Sonoma Valley Groundwater Management Plan, and the Sonoma Creek Watershed Enhancement Plan.

The funding agreement also provides some funds to support the vegetation management in the lowr channel.



Project Cost									
Acquisition:	0								
Construction:	20								
Furniture/Reloc:	0								
Design/PM:	659								
Other:	0								
Project Total:	679								

_		
	O and M	Cost
)	Utilities:	0
)	Maintenance	0
)	Other:	0
)		
)		
)	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Zone 3A	33020300	288	391	0	0	0	0	0	C	0	679
TOTALS:		288	391	0	0	0	0	0	C	0	679

Sanitation Districts/Zones

This five-year plan includes funding for 28 projects related to the sanitation zones and districts managed by the Water Agency. The projects in this section of the plan meet the objectives in Sanitation Goals and Strategies in the Water Agency's Strategic Plan.

Current Five-Year Plan for Airport-Larkfield-Wikiup Sanitation Zone:

In this five-year plan, there are three projects identified for funding in the Airport-Larkfield-Wikiup Sanitation Zone. No new projects were added to the F.Y. 2015-16 through F.Y.2019-20 capital plan.

Current Five-Year Plan for Geyserville Sanitation Zone:

In this five-year plan, there are two projects identified for funding in the Geyserville Sanitation Zone. One new project, consisting of the Force Main Improvement (Lift Station to Treatment Plant) was added to the F.Y. 2015-16 through F.Y.2019-20 capital plan.

Current Five-Year Plan for Occidental County Sanitation District:

In this five-year plan, there are three projects identified for funding in the Occidental County Sanitation District. No new projects were added to the F.Y. 2015-16 through F.Y.2019-20 capital plan, though the Recycled Water Project has replaced the formerly identified OCSD Permit Compliance Project.

Current Five-Year Plan for Penngrove Sanitation Zone:

In this five-year plan, there are two projects identified for funding in the Penngrove Sanitation Zone. One new project, consisting of future capital replacements that represent planned allocations for future capital projects to be identified, was added to the F.Y. 2015-16 through F.Y.2019-20 capital plan.

Current Five-Year Plan for Russian River County Sanitation District:

In this five-year plan, there are three projects identified for funding in the Russian River County Sanitation District. One new project, consisting of capital improvement projects that represent planned allocations for future capital projects to be identified, was added to the F.Y. 2015-16 through F.Y.2019-20 capital plan. The formerly identified Biological Nutrient Removal and Disinfection Upgrade projects were completed in 2014.

Current Five-Year Plan for Sea Ranch Sanitation Zone:

In this five-year plan, there is one project identified for funding in the Sea Ranch Sanitation Zone. The project, consisting of planned allocations for future capital replacements to be identified, was added to the F.Y. 2015-16 through F.Y.2019-20 capital plan.

Current Five-Year Plan for Sonoma Valley County Sanitation District:

In this five-year plan, there are 11 projects identified for funding in the Sonoma Valley County Sanitation District. One new project, consisting of future collection system replacement/rehabilitation projects to be identified, was added to the F.Y. 2015-16 through F.Y.2019-20 capital plan. The formerly identified New Recycled Water Service (McGill Road) project will be completed in 2015.

Current Five-Year Plan for South Park County Sanitation District:

In this five-year plan, there are three projects identified for funding in the South Park County Sanitation District. No new projects were added to the F.Y. 2015-16 through F.Y.2019-20 capital plan. The formerly identified Gloria/Meekland Collection System Replacement Project was completed in 2014.

Drain Improvement for Microfiltration Building

Request #: WA08010 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2015Division/Section:Airport-Larkfield-Wikiup Sanitation ZoneEnd Date:06/30/2016

Description:

Improve drainage in the vicinity of the filter building by installing new perminant storm drain piping to replace temporary drain piping.



Project Cost								
Acquisition:	(
Construction:	80							
Furniture/Reloc:	(
Design/PM:	20							
Other:	(
Project Total:	100							

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
ALWSZ	33100200	0	0	100	0	0	0	0	100	0	100
TOTALS:	,	0	0	100	0	0	0	0	100	0	100

Filter Modules Replacement

Request #: WA14027 Status: Funded

Function: Development Services

Status:

Department: Water Agency

Start Date: 07/01/2017

Request

Division/Section: Airport-Larkfield-Wikiup Sanitation Zone

End Date: 06/30/2020

Description:

Replace microfiltration filter modules at end of useful life.



Project Cost								
Acquisition:	(
Construction:	380							
Furniture/Reloc:	(
Design/PM:	20							
Other:	(
Project Total:	400							

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
ALWSZ	33100100	0	0	0	0	200	0	0	200	200	400
TOTALS:	,	0	0	0	0	200	0	0	200	200	400

South Pond Recirculation Pipeline

Request #: WA11005 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Airport-Larkfield-Wikiup Sanitation ZoneEnd Date:06/30/2016

Description:

Construct new pipeline and pump at the treatment plant to recirculate secondary treated wastewater for tertiary treatment and improve suspended solids removal.



Project Cost								
Acquisition:	0							
Construction:	878							
Furniture/Reloc:	0							
Design/PM:	151							
Other:	6							
Project Total:	1,034							

Cost
0
0
0
0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
ALWSZ	33100200	34	600	400	0	0	0	0	400	0	1,034
TOTALS:	•	34	600	400	0	0	0	0	400	0	1,034

Capital Replacement Projects

Request #: WA09011 Status: Funded

Function: Development Services

Status: Request

Department: Water Agency

Start Date: 07/01/2015

Division/Section: Geyserville Sanitation Zone

End Date: 06/30/2023

Description:

Construction of improvements to repair, rehabilitate, or replace portions of the collection and/or treatment systems that are deteriorated or have insufficient capacity for existing flows.



Project Cost									
Acquisition:	0								
Construction:	85								
Furniture/Reloc:	0								
Design/PM:	20								
Other:	0								
Project Total:	105								

O and M	Cost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
GSZ	33110200	0	0	15	15	15	15	15	75	30	105
TOTALS:		0	0	15	15	15	15	15	75	30	105

Force Main Improvement (Lift Station to Treatment Plant)

Request #: WA15018 Status: Funded

Construction of improvements to repair, rehabilitate, or replace the force main between the lift station and the

Development Services Function:

treatment plant, or portions thereof.

Status:

Request

Department: Division/Section:

Description:

Water Agency Geyserville Sanitation Zone **Start Date: End Date:**

07/01/2015 06/30/2017



Project Cost									
Acquisition:	0								
Construction:	65								
Furniture/Reloc:	0								
Design/PM:	30								
Other:	5								
Project Total:	100								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0
	Utilities: Maintenance Other:

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
GSZ	33110200	0	0	100	0	0	0	0	100	0	100
TOTALS:	•	0	0	100	0	0	0	0	100	0	100

Lift Station Upgrade

Request #: WA12016 Status: Funded

Function:Development ServicesStatus:Department:Water AgencyStart Date:

Department:Water AgencyStart Date:07/01/2012Division/Section:Occidental County Sanitation Dist.End Date:06/30/2015

Description:

Construction of improvements to repair or replace deteriorated portions of the existing wastewater lift station - primarily electrical system components.



Project Cost								
Acquisition:	(
Construction:	128							
Furniture/Reloc:	(
Design/PM:	(
Other:	(
Project Total:	128							

Active

_											
	O and M Cost										
)	Utilities:	0									
3	Maintenance	0									
)	Other:	0									
)											
)											
8	OM Total:	0									

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
OCSD	33060200	103	25	0	0	0	0	0	(0	128
TOTALS:	,	103	25	0	0	0	0	0	(0	128

Lateral Replacement Project

Request #: WA12015 Status: Partially Funded

Function: Development Services

Status:

Active

Department:

Water Agency

Start Date:

07/01/2009

Division/Section:

Description:

Occidental County Sanitation Dist.

A program to replace leaking laterals on private property to reduce inflow into the treatment plant.

End Date:

06/30/2016



Project Cost									
Acquisition:	0								
Construction:	258								
Furniture/Reloc:	0								
Design/PM:	140								
Other:	0								
Project Total:	399								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
OCSD	33060100	199	100	100	0	0	0	0	100	0	399
TOTALS:		199	100	100	0	0	0	0	100	0	399

Recycled Water Project

Request #: WA14020 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Occidental County Sanitation Dist.End Date:06/30/2018

Description:

Construction of improvements to the treatment, storage, and recycled water distribution systems to operate the overall system in compliance with applicable NPDES permit requirements.



Project Cost									
Acquisition:	275								
Construction:	4,450								
Furniture/Reloc:	C								
Design/PM:	1,110								
Other:	358								
Project Total:	6,193								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
OCSD	33060200	18	650	600	4,600	325	0	0	5,525	0	6,193
TOTALS:		18	650	600	4,600	325	0	0	5,525	0	6,193

Future Capital Replacements

Request #: WA15003 Status: Funded

Function: Development Services

Water Agency

Services Status: Request Start Date: 7/1/2016

Division/Section: Penngrove Sanitation Zone **End Date:** 06/30/2023

Description:

Department:

Construct improvements to repair, rehabilitate, or replace portions of the collection and/or pumping system that are determaned or known to have insufficient capacity for existing flows



Project Cost									
Acquisition:	10								
Construction:	125								
Furniture/Reloc:	0								
Design/PM:	35								
Other:	10								
Project Total:	180								

O and M Cost								
Utilities:	0							
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015-	FY2 2016-	FY3 2017-	FY4 2018-	FY5 2019-	5YR Total	Future YRs	Project
				16	17	18	19	20			Total
PSZ	33120200	0	0	0	30	30	30	30	120	60	180
TOTALS:		0	0	0	30	30	30	30	120	60	180

Lift Station Motor Control Center Upgrade

Request #: WA12018 Status: Funded

Function: Development Services

Status: Request Start Date: 07/01/2013

Department: Water Agency **Division/Section:** Penngrove Sanitation Zone

End Date: 06/30/2015

Description:

Replacement of Motor Control Center Cabinets in the Lift Station. To facilitate future pump upgrades safeguard against flooding.



Project Cost								
Acquisition:	C							
Construction:	355							
Furniture/Reloc:	C							
Design/PM:	200							
Other:	85							
Project Total:	640							
	I							

O and M Co	st
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
PSZ	33120100	0	0	285	355	0	0	0	640	0	640
TOTALS:		0	0	285	355	0	0	0	640	0	640

Capital Improvement Projects

Request #: WA15020 Status: Funded

Function: Development Services

Status: Request Start Date: 07/01/2015

Department: Water Agency **Division/Section:** Russian River County Sanitation Dist.

End Date: 06/30/2026

Description:

Construction of improvements to repair, rehabilitate, or replace the force main between the lift station and the treatment plant, or portions thereof.



Project Cost									
Acquisition:	100								
Construction:	4,200								
Furniture/Reloc:	0								
Design/PM:	750								
Other:	250								
Project Total:	5,300								

O and M	Cost		
Maintenance	0		
Other:	0		
OM Total:	0		

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
RRCSD	330702000	0	0	200	200	200	200	200	1,000	4,300	5,300
TOTALS:		0	0	200	200	200	200	200	1,000	4,300	5,300

Vacation Beach Lift Station Improvements

Request #: WA08022 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Russian River County Sanitation Dist.End Date:06/30/2016

Description:

Replace deteriorated portions of the piping/pumping equipment at the Vacation Beach Lift Station to reduce the risks of failures, leaks, and spills.



Project Cost									
Acquisition:	(
Construction:	100								
Furniture/Reloc:	(
Design/PM:	(
Other:	(
Project Total:	100								

	O and M	Cost
)	Utilities:	0
)	Maintenance	0
)	Other:	0
)		
)		
)	OM Total:	0

 ${\bf Net\ Impact\ On\ Operating\ Budget:}$

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
RRCSD	33070200	0	100	0	0	0	0	0	(0	100
TOTALS:		0	100	0	0	0	0	0	(0	100

Irrigation Reliability and Beneficial Reuse

Status:

Request #: WA18023 Status: Partially Funded

Function: Development Services

Request Water Agency **Start Date:** 07/01/2006 **Department:**

06/30/2025 **Division/Section:** Russian River County Sanitation Dist. **End Date:**

Description:

Construct pumping, piping, and storage improvements to the wastewater reclamation system and increase beneficial reuse of recycled water.



Project Cost									
Acquisition:	400								
Construction:	7,561								
Furniture/Reloc:	(
Design/PM:	950								
Other:	650								
Project Total:	9,561								
	I								

O and M Cost								
Utilities:								
Maintenance	0							
Other:	0							
OM Total:	0							

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Other	33070200	681	30	30	30	30	30	30	150	8,700	9,561
TOTALS:		681	30	30	30	30	30	30	150	8,700	9,561

Future Capital Replacements

Request #: WA08025 Status: Funded

Function: Development Services **Status:**

Department: Water Agency

Request **Start Date:** 07/01/2013

Division/Section: Sea Ranch Sanitation Zone **End Date:** 06/30/2020

Description:

Construction of improvements to repair, rehabilitate, or replace portions of the collection and/or treatment systems that are deteriorated or have insufficient capacity for existing flows.



Project Cost								
0								
200								
0								
40								
0								
240								

,		
	O and M	Cost
	Utilities:	C
	Maintenance	C
	Other:	C
	OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SRSZ	33130200	0	40	40	40	40	40	40	200	0	240
TOTALS:		0	40	40	40	40	40	40	200	0	240

Chlorine Contact Chamber Coating

Request #: WA08027 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Sonoma Valley County Sanitation Dist.End Date:06/30/2016

Description:

Provide a protective interior coating for the concrete chlorine contact basin at the wastewater treatment plant to seal the basin and inhibit the degredation of the concrete and reinforcing steel.



Project Cost									
Acquisition:	(
Construction:	360								
Furniture/Reloc:	(
Design/PM:	90								
Other:	(
Project Total:	450								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080100	70	380	0	0	0	0	0	(0	450
TOTALS:		70	380	0	0	0	0	0	(0	450

Collection System Creek Crossings

Request #: WA11026 Status: Funded

Development Services Function:

Status:

Active

Department:

Water Agency

Start Date:

07/01/2011

Division/Section: Sonoma Valley County Sanitation Dist.

End Date:

06/30/2017

Description:

Upgrade collection system pipe crossings at waterways to prevent damage during high stream flow events.



Project Cost									
Acquisition:	21								
Construction:	336								
Furniture/Reloc:	C								
Design/PM:	218								
Other:	157								
Project Total:	732								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080100	207	165	0	360	0	0	0	360	0	732
TOTALS:		207	165	0	360	0	0	0	360	0	732

Future Collection System Replacements/Rehabilitation

Request #: WA15021 Status: Funded

Function: Development Services

Status:

Department: Water Agency

Start Date:

Division/Section: Sonoma Valley County Sanitation Dist.

End Date: 06/30/2023

Request

07/01/2017

Description:

Replace and/or Rehabilitate collection system, pipe and related infrastructure to reduce inflows and infiltration into the system.



Project Cost									
Acquisition:	500								
Construction:	9,000								
Furniture/Reloc:	C								
Design/PM:	2,000								
Other:	500								
Project Total:	12,000								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080200	0	0	0	0	3,000	0	3,000	6,000	6,000	12,000
TOTALS:		0	0	0	0	3,000	0	3,000	6,000	6,000	12,000

Reline Equalization Ponds

Request #: WA08032 Status: Funded

Replace the impermeable liners for the existing equalization basins at the wastewater treatment plant to prevent

Function: Development Services **Status:**

Active

Department:

seepage out of the basins.

Water Agency

Start Date:

07/01/2012

Description:

Division/Section: Sonoma Valley County Sanitation Dist.

End Date:

06/30/2018



Project Cost									
Acquisition:	0								
Construction:	1,534								
Furniture/Reloc:	0								
Design/PM:	152								
Other:	7								
Project Total:	1,693								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080200	16	76	1,000	0	600	0	0	1,601	0	1,693
TOTALS:		16	76	1,000	0	600	0	0	1,601	0	1,693

Sonoma Creek Bank Repair

Request #: WA14021 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2012Division/Section:Sonoma Valley County Sanitation Dist.End Date:06/30/2016

Description:

Implement measures to stabilize a failing stream bank and protect existing sewer pipes located along Sonoma Creek in Glen Ellen area, south of Kohler Creek confluence.



Project Cost										
17										
393										
C										
111										
45										
566										

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080100	71	400	95	0	0	0	0	95	0	566
TOTALS:		71	400	95	0	0	0	0	95	0	566

Trunk Sewer Replacement MH90-3 to MH 136-5

Request #: WA09030 Status: Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2008Division/Section:Sonoma Valley County Sanitation Dist.End Date:06/30/20122

Description:

The existing 21-inch Reinforced Concrete Pipe trunk sewer, and its appurtenant manholes, was constructed around 1958. This project will replace approximately 9,100 feet of the sewer trunk and appurtenance manholes with new 27-inch diameter sewer trunk from the intersection of 6th St. West at Studley St. to Happy Lane, including a double siphon crossing of Agua Caliente Creek. The overall project has been split into 3 segments of roughly the same size, in addition to a separate segment for the crossing of Agua Caliente Creek. The 2001 Sonoma Valley County Sanitation District wet Weather Sewer Analysis of the existing trunk system found that much of the existing sewer trunk is inadequately sized to carry the discharge for future District buildout plus the inflow and infiltration from a 20-year frequency design storm. Additionally, the original RCP trunk sewer is reaching the end of its service life.



Project Cost									
Acquisition:	1,300								
Construction:	15,405								
Furniture/Reloc:	0								
Design/PM:	2,700								
Other:	651								
Project Total:	20,055								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Personnel: 0 **Revenue/Refund:** 0

Net Impact On Operating Budget:

NOTE THE AGUA CREEKPART GOT REBUDGETED 47300

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080200	1,417	3,363	660	4,930	595	5,440	400	12,025	3,250	20,055
TOTALS:		1,417	3,363	660	4,930	595	5,440	400	12,025	3,250	20,055

Sonoma Valley Recycled Water Project (5th St. E - Denmark St.)

Request #: WA12103 Status: Funded/Funded by Others

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Sonoma Valley County Sanitation Dist.End Date:06/30/2017

Description:

Construct new recycled water distribution piping along Fifth Street East and connecting portions of Watmaugh Road and Denmark Street. Pipeline will provide urban reuse to 3 school and one city park, as well as agricultural irrigation.



Project Cost									
Acquisition:	33								
Construction:	2,556								
Furniture/Reloc:	C								
Design/PM:	383								
Other:	20								
Project Total:	2,992								
1	ı								

O and M	Cost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD, DWR	33080200	222	185	2,500	85	0	0	0	2,585	0	2,992
TOTALS:		222	185	2,500	85	0	0	0	2,585	0	2,992

WWTP Pump and Piping Upgrade

Request #: WA11034 Status: Funded/Funded by Others

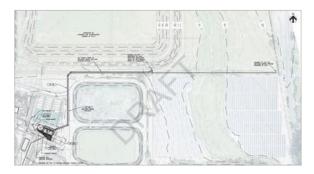
Function: Development Services Status: Active

Department: Water Agency **Start Date:** 07/01/2010

Division/Section: Sonoma Valley County Sanitation Dist. **End Date:** 06/30/2017

Description:

Construct pumping and piping upgrades at the wastewater treatment plant in order to increase quantity and flexibility for pumping recycled water to storage reservoirs, existing recycled water users, the Napa Salt Marsh, and new recycled water users located north of the treatment plant.



Project Cost									
Acquisition:	0								
Construction:	1,872								
Furniture/Reloc:	0								
Design/PM:	736								
Other:	16								
Project Total:	2,624								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD, BOR	33080200	618	1,806	200	0	0	0	0	200	0	2,624
TOTALS:		618	1,806	200	0	0	0	0	200	0	2,624

Sonoma Valley Recycled Water Project (8th St. East, WWTP to Napa Rd.)

Request #: WA11036 Status: Partially Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2016Division/Section:Sonoma Valley County Sanitation Dist.End Date:06/30/2017

Description:

Construct new recycled water distribution piping along Eighth Street East, from the wastewater treatment plant north to Napa Road.



Project Cost									
Acquisition:	0								
Construction:	2,000								
Furniture/Reloc:	0								
Design/PM:	400								
Other:	0								
Project Total:	2,400								

	O and M	Cost
)	Utilities:	0
)	Maintenance	0
)	Other:	0
)		
)		
)	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015-	FY2 2016-	FY3 2017-	FY4 2018-	FY5 2019-	5YR Total	Future YRs	Project
				16	17	18	19	20			Total
Other	33080200	0	0	0	400	2,000	0	0	2,400	0	2,400
TOTALS:		0	0	0	400	2,000	0	0	2,400	0	2,400

Sonoma Valley Recycled Water Project (Watmaugh to Arnold)

Request #: WA09035 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2013Division/Section:Sonoma Valley County Sanitation Dist.End Date:06/30/2017

Description:

Construct new recycled water distribution piping along Watmaugh Road, from east of Broadway to Arnold Drive. Current efforts are limmited to planning and coordination at th sonoma creek crossing



Project Cost									
Acquisition:	0								
Construction:	2,200								
Furniture/Reloc:	0								
Design/PM:	420								
Other:	0								
Project Total:	2,620								

O and M Cost Utilities: 0 Maintenance 0 Other: 0 OM Total: 0	_		
Maintenance 0 Other: 0		O and M	Cost
Other: 0		Utilities:	C
		Maintenance	C
OM Total:		Other:	C
OM Total:			
OM Total:)		
		OM Total:	C

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080200	2	218	0	0	0	0	0	(2,400	2,620
TOTALS:		2	218	0	0	0	0	0	(2,400	2,620

Sonoma Valley Recycled Water Project (Napa Rd., E of 8th St. East)

Request #: WA14024 Status: Unfunded

Function: Development Services **Status:**

Water Agency **Department:**

Request **Start Date:** 07/01/2017

Division/Section: Sonoma Valley County Sanitation Dist.

06/30/2020 **End Date:**

Description:

Construct new recycled water distribution piping along Napa Road, east of 8th Street East.



Project Cost									
Acquisition:	C								
Construction:	2,000								
Furniture/Reloc:	C								
Design/PM:	400								
Other:	C								
Project Total:	2,400								

_		
	O and M	Cost
)	Utilities:	0
)	Maintenance	0
)	Other:	0
)		
)		
)	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SVCSD	33080200	0	0	0	0	200	200	2,000	2,400	0	2,400
TOTALS:		0	0	0	0	200	200	2,000	2,400	0	2,400

Blackwell Tract Collection System Replacement

Request #: WA05040 Status: Funded

Function:Development ServicesStatus:RequestDepartment:Water AgencyStart Date:07/01/2009Division/Section:South Park County Sanitation Dist.End Date:06/30/2019

Description:

Replace approximately 5600 feet of existing 6-inch Vitrified Clay Pipe (VCP) and Asbestos Cement Pipe (ACP) sewer mains and appurtenant laterals, manholes, and main line cleanouts with new 8-inch plastic sewer pipe, laterals, mainline cleanouts, and precast concrete manholes. Additionally, approximately 580 feet of existing 4-inch water main and appurtenance will be replaced with 8-inch plastic water through an agreement with the City of Santa Rosa. The existing sewer facilities were originally constructed in approximately the mid-1950's.



Project Cost									
Acquisition:	57								
Construction:	3,400								
Furniture/Reloc:	0								
Design/PM:	483								
Other:	14								
Project Total:	3,954								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SPCSD	33090200	168	245	0	400	3,000	140	0	3,540	0	3,954
TOTALS:		168	245	0	400	3,000	140	0	3,540	0	3,954

East Robles Collection System Replacement

Request #: WA11037 Status: Funded

Function: Development Services

Status:

Active

Department: Water Agency

Division/Section: South Park County Sanitation Dist.

Start Date: End Date: 07/01/2013 06/30/2017

Description:

This project will replace approximately 3000 feet of deteriorated and sub-standard sewer collection system piping and appurtenances in the vicinity of E. Robles Ave.



Project Cost										
Acquisition:	53									
Construction:	1,410									
Furniture/Reloc:	C									
Design/PM:	260									
Other:	32									
Project Total:	1,755									

O and M Cost							
Utilities:	0						
Maintenance	0						
Other:	0						
OM Total:	0						

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SPCSD	33090200	5	1,726	0	25	0	0	0	25	0	1,755
TOTALS:		5	1,726	0	25	0	0	0	25	0	1,755

West Robles Collection System Replacement

Request #: WA11038 Status: Funded

Function: Development Services **Status:**

Active

Department: Water Agency **Start Date:**

07/01/2012

Division/Section: South Park County Sanitation Dist.

End Date:

06/30/2017

Description:

Replace existing collection system pipelines and appurtenances that are deteriorated along an approximate 500 foot length of West Robles Drive, east of Moorland Avenue.



Project Cost									
Acquisition:	0								
Construction:	455								
Furniture/Reloc:	0								
Design/PM:	303								
Other:	10								
Project Total:	767								

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
SPCSD	33090200	167	600	0	0	0	0	0	C	0	767
TOTALS:	•	167	600	0	0	0	0	0	C	0	767

Administration and General

Current Five-Year Plan:

This five year capital plan includes no General Fund projects, no Spring Lake Park Fund projects, and one Sustainability-Renewable Energy Fund project.

The projects identified in this section of the plan meet the objectives in Water Supply, Sanitation, and/or Energy Goals and Strategies of the Agency's Strategic Plan.

Changes from prior plan:

No new projects were added to the list of projects for Administration and General Funds in the F.Y. 2015-16 through F.Y. 2019-20 capital plan. The formerly identified Composting Toilets Pilot Study was withdrawn for feasibility.

Biomass Conversion

Request #: WA11004 Status: Partially Funded

Function: Development Services Status: Active

Department:Water AgencyStart Date:07/01/2012Division/Section:General FundEnd Date:06/30/2016

Description:

Investigate conversion of locally available biomass into energy.



Project C	ost
Acquisition:	4
Construction:	55
Furniture/Reloc:	0
Design/PM:	49
Other:	188
Project Total:	295

Cost
0
0
0
0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Sustainability-Renewable Energy Fund		183	0	112	0	0	0	0	112	0	295
TOTALS:		183	0	112	0	0	0	0	112	0	295

Internal Service

Current Five-Year Plan:

In this five-year plan, there are eight projects identified for funding in the Internal Services Fund, including three Facilities Fund projects and five Power Resources Fund projects.

Changes from prior plans:

Four new Power Resources Fund Projects, consisting of Energy Storage, Russian River Main Lift PWRPA 12kV Power Distribution, Sonoma Valley R4 PWRPA Power Distribution, and SVTP RPS Meter, were added to the list of projects for Internal Services Fund in the F.Y. 2015-16 through F.Y. 2019-20 capital plan. The formerly identified Sea Ranch Solar PV project was withdrawn for feasibility.

404 Aviation Blvd Roof

Request #: WA12345 Status: Funded

Development Services Function: Status: Start Date:

06/30/2016 **Division/Section:** Internal Services Fund **End Date:**

Description:

Department:

Water Agency

Re-Roof the administration building 404 Aviation Boulevard with new roofing membrane. Photo Volteic panels will need to be removed and re-installed. Existing roofing will be removed and new applied.



Project Cost									
Acquisition:	2								
Construction:	1,149								
Furniture/Reloc:	C								
Design/PM:	205								
Other:	30								
Project Total:	1,386								

Active

03/01/2012

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Facilities Fund	33050200	237	1,149	0	0	0	0	0	(0	1,386
TOTALS:		237	1,149	0	0	0	0	0	(0	1,386

Energy Storage

Request #: WA15022 Status: Funded

Function: Development Services Status: Request

Department:Water AgencyStart Date:07/01/2015Division/Section:Internal Services FundEnd Date:06/30/2017

Description:

Evaluate energy storage adequate for optimizing intermittent source generation.



Project Cost								
Acquisition:	(
Construction:	(
Furniture/Reloc:	(
Design/PM:	(
Other:	380							
Project Total:	380							

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0

Personnel: 0 **Revenue/Refund:** 0

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Power Resources	33050300	0	0	380	0	0	0	0	380	0	380
TOTALS:		0	0	380	0	0	0	0	380	0	380

Net Impact On Operating Budget:

Geyserville Solar PV

Request #: WA14015 Status: Funded

Function: Development Services

Status: Active

Department: Water Agency

Division/Section: Internal Services Fund

Start Date: 07/01/2013 **End Date:** 06/30/2015

Description:

Construct a 60kW solar photovoltaic power system to provide approximately 80% of the treatment plant's electrical energy consumption.



Project Cost								
Acquisition:	0							
Construction:	250							
Furniture/Reloc:	0							
Design/PM:	57							
Other:	0							
Project Total:	307							

O and M	Cost
Utilities:	0
Maintenance	0
Other:	0
OM Total:	0
	Utilities: Maintenance Other:

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Power Resources	33050300	7	250	50	0	0	0	0	50	0	307
TOTALS:	•	7	250	50	0	0	0	0	50	0	307

Russian River Main Lift PWRPA 12 kV Power Distribution

Request #: WA15024 Status: Funded

Function: Development Services

Status:

Department: Water

Water Agency

Start Date:

Active

Division/Section:

Internal Services Fund

End Date:

07/01/2014 06/30/2016

Description:

Construct electrical improvements at the main lift stationin order to provide power supplied through PWRPA.



Project Cost									
Acquisition:	C								
Construction:	150								
Furniture/Reloc:	C								
Design/PM:	43								
Other:	C								
Project Total:	193								

O and M Co	ost
Utilities:	(
Maintenance	(
Other:	(
OM Total:	(

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	1.	FY2 2016-	FY3 2017-	FY4 2018-		5YR Total	Future YRs	
				16	1 /	18	19	20			Total
Power Resources	330503300	0	43	150	0	0	0	0	150	0	193
TOTALS:		0	43	150	0	0	0	0	150	0	193

Service Center Parking Lot

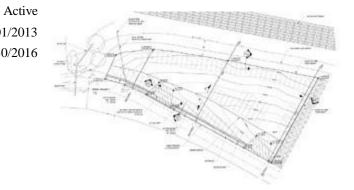
Request #: WA13107 Status: Funded

Function: Development Services Status:

Department:Water AgencyStart Date:01/01/2013Division/Section:Internal Services FundEnd Date:06/30/2016

Description:

Construction of parking facilities at the Airport Treatment plant for the Water Agency's maintenance service center.



Project Cost									
Acquisition:	0								
Construction:	943								
Furniture/Reloc:	0								
Design/PM:	125								
Other:	10								
Project Total:	1,077								

0
0
0
0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Facilities Fund	33050200	464	613	0	0	0	0	0	(0	1,077
TOTALS:		464	613	0	0	0	0	0	(0	1,077

Sonoma Valley R4 PWRPA 12kV Power Distribution

Request #: WA15025 Status: Funded

Function: Development Services

Department: Water Agency

Start Date: 07/01/2014

Status:

Division/Section: Internal Services Fund

End Date: 06/30/2016

Active

Description:

Construct electrical improvements at the main lift stationin order to provide power supplied through PWRPA.



Project Cost								
Acquisition:	(
Construction:	135							
Furniture/Reloc:	(
Design/PM:	72							
Other:	(
Project Total:	207							

	O and M	O and M Cost									
)	Utilities:	0									
	Maintenance	0									
)	Other:	0									
,											
)											
	OM Total:	0									

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Power Resources	333050300	0	72	135	0	0	0	0	135	0	207
TOTALS:	·	0	72	135	0	0	0	0	135	0	207

SVTP RPS Meter

Request #: WA15023 Status: Funded

Development Services **Function: Department:**

Water Agency

Request **Status: Start Date:** 07/06/2015

Internal Services Fund **Division/Section:**

End Date: 06/30/2016

Description:

Instal Metering Equipment Associated with the Photo volteic array located at the Sonoma Valley Waste Water Treatment Plant.



Project Cost									
Acquisition:	4								
Construction:	135								
Furniture/Reloc:	0								
Design/PM:	104								
Other:	5								
Project Total:	248								

_		
	O and M	Cost
ļ	Utilities:	0
,	Maintenance	0
)	Other:	0
ļ		
;		
3	OM Total:	0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Power Resources	333050300	0	0	248	0	0	0	0	248	0	248
TOTALS:		0	0	248	0	0	0	0	248	0	248

Water Smart Demonstration Project

Request #: WA14018 Status: Partially Funded

Function:Development ServicesStatus:ActiveDepartment:Water AgencyStart Date:07/01/2010Division/Section:Internal Services FundEnd Date:06/30/2020

Description:

Construct site improvements to retrofit the administration and O&M facilities with Best Management Practices for stormwater management. The project will be implemented in phases, as funds are available.



Project Cost									
Acquisition:	0								
Construction:	1,300								
Furniture/Reloc:	0								
Design/PM:	309								
Other:	5								
Project Total:	1,614								

Cost
0
0
0
0

Net Impact On Operating Budget:

Funding Source	Dept ID	Prior FYs	Current FY	FY1 2015- 16	FY2 2016- 17	FY3 2017- 18	FY4 2018- 19	FY5 2019- 20	5YR Total	Future YRs	Project Total
Facilities Fund	33050200	214	39	0	200	201	320	320	1,041	320	1,614
TOTALS:		214	39	0	200	201	320	320	1,041	320	1,614